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SMALLPOX, NOT PLAGUE, AT CHATTANOOGA, TENN.

There were in circulation recently rumors that plague existed in Chattanooga, Tenn. An officer of the Public Health Service was sent to investigate conditions, and his report will be found on page 327. There was no evidence whatsoever of the present or past existence of plague in Chattanooga. There was, however, an outbreak of virulent smallpox, and this undoubtedly explains the origin of the false rumors regarding plague.

The smallpox infection in this outbreak apparently came originally from Mexico, where the virulent type prevails quite generally. This virulent type is being continually imported from Mexico into the United States. It has usually entered this country across the international boundary, and most of the resulting outbreaks of the disease have been in California, Texas, Arkansas, and Oklahoma. It may be that outbreaks of virulent smallpox in other parts of the country for which it was impossible to trace the origin of the infection also came from Mexico, but left no trail by which they could be traced.

It has been the usual experience in this country that whenever an unusual outbreak of any communicable disease occurred in a city, and more particularly in the larger cities, the local commercial interests, through the local press, attempted to belittle the importance of the outbreak and to refrain from publishing full information. The usual result of such a course is that rumors begin to spread to neighboring communities and States. Rumors in the absence of a knowledge of the facts seem to produce in the minds of people of the neighboring communities a fear and dread out of all proportion to that merited by actual conditions. In such instances the establishment of commerce-embarrassing quarantines by other cities are by no means unusual. This appears to have been the course of events at Chattanooga.

In its own interests and to avoid uncalled-for fear and unwarranted precautionary measures on the part of other communities, the only course a city can follow when it has an unusual outbreak of a communicable disease is full publicity. This robs rumor of its demoraliz-

ing effect and creates in the minds of outsiders a belief that the affected community has conditions well in hand and is capable of controlling the epidemic. Publicity seems to show confidence on the part of the affected community and to produce confidence in others.

DIFFICULTIES IN OBTAINING AGES.

POPULAR IGNORANCE AND CARELESSNESS REGARDING ONE'S BIRTHDAY AND AGE.

By C. W. STILES, Professor of Zoology, Hygienic Laboratory, United States Public Health Service.

Recently, during a study of about 5,000 school children, whites and negroes, in counties X and Z, the point was brought out very strikingly that there is a very great carelessness or ignorance among school children in reference to their age and birthday.

Still more striking, this ignorance was not entirely absent from the parents.

Were the question of child labor in the mills at issue, discrepancies in data given in answer to questions would be expected, but the study involved school children who had no possible ground for deception and they knew I was their friend, hence they had no reason to fear me.

A few instances of the many cases that came to notice may be cited with profit.

If a child is asked his or her age the reply may cover the age at the last or at the next birthday. There seems to be no rule in regard to this point. If the question asks specifically for the age at last birthday, the age at next birthday will frequently be given.

High-school white pupils, even in the junior and senior years, have given me two or even three different ages and it has been impossible for me to determine the correct age.

One boy of about 10 years assured me that he was "8, going on 12."

Girls of 15 have claimed to be 13 to 17 years old.

The question arises: Is a lack of knowledge of one's age a sign of lack of mentality? My experience would lead me to assume that while mental defectives and very young children may not know their year-age, no reliable conclusion as to mentality can be drawn, predicated upon this point, for among the many instances that have come to my notice was one in which a university graduate signed an oath as 3 years younger than the records showed him to be. This man acted in good faith and held to this point until the proof was produced that he was in error.

When children are asked the day of their birthday, correct answers will be obtained from the majority, but in my experience it is a common matter for a school pupil (even a high-school pupil in some cases) not to know either the day or the month of his or her birth.

If, now, a pupil is asked for his or her age at last birthday and answers correctly, and is then requested to give the year of birth, it is positively astonishing how large a percentage of children—even high-school pupils—will give erroneous answers. More than that, if parents are asked for the age and birthday, month and year, of their children, relatively few fathers can give correct answers, as far as my experience goes, and many mothers can not answer questions correctly.

A very small percentage of high-school children or even of adults seem to know the age or birth year of their parents.

To gather trustworthy information from negroes as to age seems almost a hopeless undertaking, for about one-half of the negro school children questioned had no idea how old they were or on what day or in what month or year they were born.

The information gathered from white children is much more detailed and trustworthy than that gathered from negroes.

The foregoing remarks apply not only to families of laborers and farmers, but to educated families, to professional families, to leading families in a community, and they apply much more generally than one would suspect before attempting to gather the information.

The condition described is additional evidence in favor of a rapid extension of birth registration and issuance of birth-registration certificates to parents, for the subject is one of practical application not only in legal but also in medical matters.

THE PURITY AND STRENGTH OF HOUSEHOLD REMEDIES.

VARIATIONS IN PURITY AND STRENGTH OF WIDELY USED DRUGS AND PREPARATIONS A POSSIBLE SOURCE OF DANGER TO THE PATIENT.

By MARTIN I. WILBERT, Technical Assistant, Division of Pharmacology, Hygienic Laboratory, United States Public Health Service.

Up to the present time insufficient authoritative information is available regarding the variability of drug action due either to the condition of the patient or to the differences in the strength and purity of the several drugs or preparations used as remedies for the prevention or cure of diseases.

That these causes of variation in drug action involve problems of considerable importance is evidenced by the fact that the normal metabolic processes of the human organism are readily interfered with, and that no two persons will react exactly alike to physical or chemical stimuli.

While the problems involved in the differences in the reaction of the human organism to the effect of medicines because of idiosyncrasy or special susceptibility of the patient are as yet largely beyond the

control of medical men, the possible harmful influences of drugs because of their variation in purity or strength might, very properly, be given immediate attention by all who are in any way interested in the welfare of the human kind.

That complex or little-used drugs and preparations vary considerably in composition and purity is generally recognized, and physicians in directing the administration of such medicines usually safeguard the patient by restricting the use of the medicine to the production of some one well-established action or effect.

The variability in strength and purity of the more simple preparations frequently used as household remedies is not so generally recognized and the all too common indiscriminate use of such preparations is fraught with dangers that are not sufficiently well known.

The enactment of the Federal food and drugs law and the adoption of similar laws in practically all of the several States have served to attract attention to the adulteration of drugs and the enforcement of these laws should furnish a liberal supply of information regarding the shortcomings of drugs and preparations sold for use as medicine.

Hygienic Laboratory Bulletin No. 98, "A Digest of Comments on the Pharmacopœia of the United States and on the National Formulary for the Calendar year ending December 31, 1913," reflects in a rather comprehensive way the activities of the several State food and drug laboratories in so far as they relate to the examination and control of well established pharmacopœial drugs and preparations.

From a comparative study of the several available reports it is evident that the enforcement of State food and drug laws is far from being consistent and is certainly not persistent. The differences in the nature of the available reports also indicate that as yet the officials intrusted with the enforcement of food and drug laws differ greatly as to how the several laws can best be enforced and as to whether any appreciable amount of good can be accomplished by enforcing them.

As suggested in a previous communication (Pure Drugs and the Public Health, Public Health Reports, 1914, v. 29, p. 1137) the laws designed to regulate the practice of pharmacy or to restrict the distribution of potent medicines to specially trained and capable individuals who might be held directly responsible for the purity and strength of drugs and medicines are not at all effectively enforced, and the existing status of the medicine-supply business, therefore, is far from creditable to those concerned and constitutes, in effect, a serious menace to public health.

The references included in Public Health Bulletin No. 98, referred to above, show that in the chemical laboratories of the Minnesota drug and food department during the years 1902 to 1912, inclusive, a total of 50,972 samples were examined, of which 18,494, or 36.3 per cent, were found to be illegal.

A compilation of the data included in the earlier numbers of the Digest of Comments (J. Am. M. Assoc., 1913, v. 61, p. 189-191), shows that of more than 9,000 samples of six widely used pharmaceutical preparations reported on during five years more than 4,000, or approximately 45 per cent, were found to be not in compliance with the requirements of the Pharmacopœia.

A table giving the totals of the analytical results reported by eight observers shows that of 3,603 samples of drugs and medicinal preparations reported no less than 1,046, or slightly more than 29 per cent, were rejected.

The following table presents a compilation of the reported results of analyses by State chemists of samples of 10 official articles that are widely used as household remedies and emphasizes still further the need for adequate supervision of medicines that are frequently and at times freely used as household remedies.

The articles classed as rejected were found to be either grossly adulterated or to be 10 or more per cent above or below the strength prescribed by the Pharmacopœia.

Table showing reported results of analyses of samples of 10 official articles widely used as household remedies.

[A compilation from Hygienic Laboratory Bulletin No. 98.]

	Number of reporters.	Number of samples.		Percent of samples rejected.
		Examined.	Rejected.	
Alcohol.....	5	382	64	17
Camphor, spirit of.....	13	466	213	45
Camphor, liniment of.....	7	265	91	37
Ginger, tincture of.....	5	78	30	38
Iodine, tincture of.....	16	774	326	42
Opium, tincture of.....	5	29	15	50
Peppermint, spirit of.....	14	799	190	25
Solution of hydrogen peroxide.....	8	140	51	36
Spirit of nitre.....	13	379	245	65
Lime water.....	5	160	34	21
Total.....		3,472	1,259	38

The second table compiled from the data included in Hygienic Laboratory Bulletin No. 93, "A Digest of Comments for the Calendar Year Ending December 31, 1912," serves to show that the existing conditions are apparently stationary and that despite considerable variation in the relative number of the individual samples rejected the total per cent of rejected samples is practically the same.

Table showing reported results of analyses of samples of 10 official articles widely used as household remedies.

[A compilation from Hygienic Laboratory Bulletin No. 93.]

	Number of reporters.	Number of samples.		Per cent of samples rejected.
		Examined.	Rejected.	
Alcohol.....	7	98	47	48
Camphor, spirit of.....	19	802	423	53
Camphor, liniment of.....	8	597	99	17
Ginger, tincture of.....	7	74	30	41
Iodine, tincture of.....	18	984	474	48
Opium, tincture of.....	11	252	125	50
Peppermint, spirit of.....	14	270	139	51
Solution of hydrogen peroxide.....	13	1,026	90	9
Spirit of nitre.....	22	609	336	55
Lime water.....	10	635	98	15
Total.....		5,347	1,861	35

The preparations included in the above tables are much more frequently used as household remedies than on the prescription of physicians. Alcohol, while it is perhaps more commonly used as a solvent or for burning, is being quite generally used as an external application, particularly as a rub after active exercise or an unusually hot or cold bath.

Apart from the serious possibility of having a refined grade of methyl alcohol substituted for grain alcohol, it has been found that much of the commercial product is of inferior quality and frequently consists of the unrefined "heads and tails" of a run from the still. This commercial product is usually contaminated with the secondary products of fermentation and therefore does not comply with the pharmacopœial requirements for a medicinal product.

The higher alcohols and the aldehydes present in commercial alcohol not only increase the toxicity of the product but also serve to make it much more irritating when applied locally, and the combination of odoriferous substances may be such as to be at times nauseating.

The substitution of wood or methyl alcohol for grain alcohol is of course dangerous and highly reprehensible. That this substitution still occurs would appear from the report of the New Jersey Board of Health for 1912, in which the statement occurs that "Analyses made in the laboratory of hygiene, division of food and drugs, show that methyl alcohol is a common constituent of the cheaper grades of products."

These "cheaper grades of products" include practically all of the alcohol-containing household remedies enumerated in the above list. Many if not all of these preparations are sold by itinerant vendors and by keepers of general stores. The preparations so sold are usually purchased from the person supplying them at the lowest price and no systematic attempt is made to control the products in any way.

In a few States preparations of peppermint, champhor, iodine, ginger, and opium are by law required to be of pharmacopœial strength, but usually their inferiority is carefully masked by the use of misleading statements as to strength, or the stereotyped phrase, "For technical use."

That even tincture of opium is still widely used as a household remedy is evident from a communication which appears in a recent issue of the *Pharmaceutical Journal* (1914, v. 92, p. 653). This contributor asserts that for every ounce of tincture of opium that he dispenses on prescription he sells at least a gallon by retail. He further avers that most druggists do practically the same thing, and that he knows of people who can drink two ounces of tincture of opium three times a day.

The danger of variation in a preparation of this type is quite apparent, and the possible harm that may be caused by a patient becoming accustomed to the use of a weak preparation and suddenly securing one of official strength is so evident that no further comment is necessary.

Much the same line of argument applies to all of the products enumerated in the table. Any medicinal preparation that is at all active has possibilities for harm, and these possibilities are greatly increased by any variation in the strength of the preparation which will serve to lend an additional element of uncertainty to the reaction that may be expected from a certain dose.

The possibilities for harm that are involved by the variation in purity and strength of the several preparations included in the above table are altogether too numerous to be reviewed, even briefly, in a communication of this type, but a few of the more objectionable possibilities may be mentioned. The occasional substitution of methyl alcohol as a solvent has already been referred to, as has the use of commercial alcohol containing actively toxic aldehydes and higher alcohols. The very great variation in the per cent content of active constituents is an additional source of danger that is particularly evident in connection with preparations of opium, camphor, iodine, and nitrous ether.

According to the report of the Missouri food and drug commissioner, samples of "Sweet spirits of niter" were found to contain from 0.34 to 4.36 per cent of ethyl nitrite. The sudden substitution of the stronger for the weaker preparation in this series might readily produce results, from an overdose of the nitrite, that would be startling at best.

Tincture of ginger is a preparation that has long been abused in a variety of ways. In prohibition territory it is frequently used as a beverage, and this use of necessity complicates the effects that may be produced by any variation in either the nature or the amount of

the extract present or in the nature and amount of the contained alcohol.

Even the less active and alcohol-free preparations in the above list are potent for harm in a variety of ways. Lime water is frequently found to be deficient in strength and may vary from the equivalent of tap water to a preparation corresponding to pharmacopœial requirements. This preparation is widely used as an antacid and corrective in the feeding of infants and invalids, and the unrecognized absence of the alkali would, no doubt, prove to be a disturbing factor of considerable importance.

Solution of hydrogen peroxide is an unusually popular household remedy. It is frequently used as a gargle, a mouth wash, and a local application in cuts, burns, and other wounds. The commercial product may be preserved with acetanilide, may contain an excess of acid, or be altogether devoid of free oxygen. The presence of acetanilide, while perhaps not objectionable as such, entails heterogeneous decomposition products that are nauseating if not otherwise harmful. A preparation containing an excess of free acid might do considerable harm when used as a tooth wash, and a preparation that is devoid of free oxygen may be otherwise contaminated and when used on a wound might prove to be a source of infection rather than a preventive.

While, as suggested above, the household remedies sold by itinerant vendors and in general stores are frequently of inferior quality, much the same is unfortunately true of the preparations sold by licensed pharmacists, who, because of the present-day nature of their business, find it inexpedient to exercise the supervision and control of their drug stock that are expected of them by law or required by the Pharmacopœia of the United States, which is generally accepted as the official standard for drugs and preparations.

In commenting on present-day conditions in the drug business, T. J. Bradley, the dean of the Massachusetts College of Pharmacy, said:

It is very generally conceded that a very large proportion of technical adulteration is due to carelessness or ignorance on the part of retail pharmacists and only a small proportion to deliberate intent to defraud.

The nature of this carelessness or ignorance is suggested by the food and drug commissioner for South Dakota, who reports that:

Many of the variations of preparations from the official standards are due to the fact that pharmacists make errors in transposing from the metric system to apothecaries' and avoirdupois weights and measures and the use of incorrect weights and measures or using volume and weight indiscriminately.

Some of the variation in the strength of official and other preparations is no doubt due to deterioration. This question was actively discussed during 1913, and many of the observations and suggestions

made in the literature for that year are reflected in Hygienic Laboratory Bulletin No. 98. The fact, however, that deterioration does occur and that it frequently is not recognized by the pharmacist who sells the preparation, is but an additional reason for the enforcement of existing laws and a justification of the resolution adopted by the American Medical Association (J. Am. M. Assoc., 1913, v. 60, p. 2086), which reads as follows:

Whereas it has been repeatedly shown by the council on pharmacy and chemistry and by the chemical laboratory of the A. M. A., as well as by other investigators, that many drugs and preparations used in the treatment of disease are of unreliable composition, through carelessness, negligence, ignorance, and other reasons; and

Whereas this condition of affairs is against the interest of public health and the progress of the science of medicine; therefore it is evident that greater activity is needed in the enforcement of existing laws relating to drugs and medicines; therefore be it

Resolved, That the section on pharmacology and therapeutics requests the house of delegates of the A. M. A. to bring this matter to the attention of the proper Federal and State authorities and urge on them the need for more energetic and effective action in this direction.

From what has been said it would appear that a more energetic and effective control of all drugs and preparations is needed. The desirable and only really efficient method of control involves honesty, knowledge, vigilance, and care on the part of the person selling the product.

Members of boards of health and other State and Federal officials entrusted with the enforcement of laws designed to control the purity and strength of medicinal products should call attention to the desirability of having these laws enforced in a way to secure for the purchaser drugs of uniform strength and purity, with a view of minimizing as much as possible the untoward or secondary effects of potent medicines, irrespective of whether they are used as household remedies or under the direct supervision of a competent physician.

PLAGUE-ERADICATIVE WORK.

CALIFORNIA.

The following report of plague-eradication work in California for the week ended January 9, 1915, has been received from Passed Asst. Surg. Hurley, of the United States Public Health Service, in temporary charge of the work:

San Francisco, Cal.

RAT PROOFING.

New buildings:		Total area of concrete laid (sq. ft., 92,440).	
Inspections of work under construction.	214	Class A, B, and C (fireproof) buildings:	
Basements concreted (sq. ft., 41,688).....	62	Inspections made.....	253
Floors concreted (sq. ft., 30,701).....	35	Roof and basement ventilators, etc.,	
Yards, passageways, etc. (sq. ft., 20,055).	101	screened.....	1,316

San Francisco, Cal.—Continued.

RAT PROOFING—continued.

Class A, B, and C (fireproof) buildings—Con.	
Wire screening used (sq. ft., 6,626).	
Openings around pipes, etc., closed with cement.	7,060
Sidewalk lens lights replaced.	3,000
Old buildings:	
Inspections made.	294
Wooden floors removed.	27
Yards and passageways, planking removed.	12
Cubic feet new foundation walls installed.	12,421
Concrete floors installed (sq. ft., 49,956).	55
Basements concreted (sq. ft., 13,339).	16
Yards and passageways, etc., concreted (sq. ft., 24,157).	113
Total area concrete laid (sq. ft., 87,452).	
Floors rat proofed with wire cloth (sq. ft., 5,700).	2
Buildings razed.	14
New garbage cans stamped (approved).	460
Nuisances abated.	323

OPERATIONS ON THE WATER FRONT.

Vessels inspected for rat guards.	24
Reinspections made on vessels.	23
New rat guards procured.	6
Defective rat guards repaired.	2
Vessels on which cargo was inspected.	2

OPERATIONS ON THE WATER FRONT—continued.

Steamers Congress and Admiral Farragut, from Seattle (condition, O. K.; rat evidence, none):	
Milk, candles, crackers, salmon, and household goods.	cases.. 310
Flour and split peas.	sacks.. 900
Rats trapped on wharves and water front.	36
Rats trapped on vessels.	12
Traps set on wharves and water front.	137
Traps set on vessels.	52
Vessels trapped on.	12
Poisons placed on water front.	pieces.. 1,800
Bait used on water front and vessels, bacon, pounds.	6
Amount of bread used in poisoning water front.	loaves.. 6
Pounds of poison used on water front.	3

RATS COLLECTED AND EXAMINED FOR PLAGUE.

Collected.	365
Examined.	271
Found infected.	0

RATS IDENTIFIED.

Mus norvegicus.	133
Mus rattus.	82
Mus alexandrinus.	80
Mus musculus.	70

Squirrels collected and examined for plague.

Contra Costa County.	85
San Benito County.	16
Total.	101

Ranches inspected and hunted over.

Contra Costa County.	23
San Benito County.	4
Total.	26

Record of plague infection.

Places in California.	Date of last case of human plague.	Date of last case of rat plague.	Date of last case of squirrel plague.	Total number rodents found infected since May, 1907.
Cities:				
San Francisco.	Jan. 30, 1908	Oct. 23, 1908	None.	398 rats.
Oakland.	Aug. 9, 1911	Dec. 1, 1908	do.	126 rats.
Berkeley.	Aug. 28, 1907	None.	do.	None.
Los Angeles.	Aug. 11, 1908	do.	Aug. 21, 1908	1 squirrel.
Counties:				
Alameda (exclusive of Oakland and Berkeley).	Sept. 24, 1909	Oct. 17, 1909 ¹	Aug. 7, 1914	286 squirrels
Contra Costa.	May 17, 1914	None.	Oct. 23, 1914	wood rat.
Fresno.	None.	do.	Oct. 27, 1911	1,565 squirrels.
Merced.	do.	do.	July 12, 1911	1 squirrel.
Monterey.	do.	do.	Apr. 10, 1914	5 squirrels.
San Benito.	June 4, 1913	do.	Sept. 26, 1914	6 squirrels.
San Joaquin.	Sept. 18, 1911	do.	Aug. 26, 1911	36 squirrels.
San Luis Obispo.	None.	do.	Jan. 29, 1910	18 squirrels.
Santa Clara.	Aug. 31, 1910	do.	July 23, 1913	1 squirrel.
Santa Cruz.	None.	do.	May 17, 1910	25 squirrels.
Stanislaus.	do.	do.	June 2, 1911	3 squirrels.

¹ Wood rat.

The work is being carried on in the following named counties: Alameda, Contra Costa, San Francisco, Merced, San Joaquin, Santa Cruz, Stanislaus, San Benito, Santa Clara, and San Mateo.

LOUISIANA—NEW ORLEANS.

The following report of plague-eradication work in New Orleans for the week ended January 16, 1915, has been received from Surg. Corput, of the United States Public Health Service, in temporary charge of the work:

OUTGOING QUARANTINE.

Vessels fumigated with sulphur.....	40
Vessels fumigated with carbon monoxide...	21
Vessels fumigated with hydrocyanic gas....	2
Pounds of sulphur used.....	4,547
Coke consumed in carbon monoxide fumigation (pounds).....	32,600
Pounds of potassium cyanide used in hydrocyanic gas fumigation.....	170
Pounds of sodium carbonate used in hydrocyanic gas fumigation.....	170
Pounds of sulphuric acid used in hydrocyanic gas fumigation.....	280
Clean bills of health issued.....	32
Foul bills of health issued.....	8

OVERLAND FREIGHT INSPECTION.

Cars inspected, found in good order; permitted to load.....	1,809
Cars ordered repaired before loading.....	1,338
Total cars inspected.....	3,207

DESTINATION AND NUMBER OF RAILROAD CARS INSPECTED FOR WEEK ENDED JAN. 16.

Alabama.....	101
Arizona.....	1
Arkansas.....	41
California.....	14
Carolina, North.....	7
Carolina, South.....	4
Colorado.....	15
Connecticut.....	1
Delaware, North.....	2
Delaware, South.....	7
Florida.....	24
Georgia.....	40
Idaho.....	2
Illinois.....	433
Indiana.....	20
Iowa.....	10
Kansas.....	7
Kentucky.....	37
Louisiana.....	1,048
Massachusetts.....	1

DESTINATION AND NUMBER OF RAILROAD CARS INSPECTED FOR WEEK ENDED JAN. 16—contd.

Minnesota.....	4
Mississippi.....	530
Missouri.....	58
Nebraska.....	5
New Jersey.....	4
New York.....	9
Ohio.....	35
Pennsylvania.....	13
Rhode Island.....	3
Texas.....	167
Utah.....	1
Vermont.....	6
West Virginia.....	4
Wisconsin.....	6
Canada.....	7

FIELD OPERATIONS.

Rats trapped.....	8,933
Premises inspected.....	8,740
Notices served.....	1,705

BUILDINGS RAT PROOFED.

By elevation.....	113
By marginal concrete wall.....	123
By concrete floor and walls.....	245
By minor repairs.....	169
Square yards of concrete laid.....	13,815
Total buildings rat proofed.....	650
Total buildings rat proofed to date.....	8,154
Abatements.....	612
Abatements to date.....	18,088

LABORATORY OPERATIONS.

Rodents examined.....	4,410
Mus norvegicus.....	2,010
Mus rattus.....	115
Mus alexandrinus.....	346
Mus musculus.....	4,600
Unclassified and putrid.....	1,264
Total rodents received at laboratory.....	8,759
Suspicious rats.....	30
Plague rats confirmed.....	4

Rodent cases.

Case No.	Address.	Rodent found dead.	Diagnosis confirmed.	Treatment of premises.
223	Stuyvesant Docks, Wharf 6.....	Jan. 4	Jan. 11	Intensive trap-
224	.....do.....	.....do.....	.....do.....	ping. See case 223.
225	.....do.....	Jan. 6	.....do.....	Do.
226	.....do.....	Jan. 7	Jan. 12	Do.

Total number of rodents captured to Jan. 16. 232, 949
 Total number of rodents examined to Jan. 16 192, 420

Rodent cases to Jan. 16, by species:

Mus rattus..... 15
 Mus musculus..... 4

Rodent cases to Jan. 16, by species—Continued.

Mus alexandrinus..... 8
 Mus norvegicus..... 199

Total rodent cases to Jan. 16..... 226

WASHINGTON—SEATTLE.

The following report of plague-eradication work in Seattle for the week ended January 2, 1915, has been received from Surg. Lloyd, of the United States Public Health Service, in charge of the work:

RAT PROOFING.

New buildings inspected.....	49
Basements concreted (8)..... square feet..	9,821
Floors concreted, new buildings (12).....do....	26,454
Yards, etc., concreted, new structures (3), square feet.....	2,460
Sidewalks concreted..... square feet..	16,750
Total concrete laid, new structures, square feet.....	55,485
New buildings elevated.....	3
New premises rat proofed, concrete.....	46
Old buildings inspected.....	3
Old buildings rat proofed.....	1
Floors concreted, old building.....	1
Premises otherwise rat proofed, old buildings.....	2
Openings screened, old buildings.....	18
Wooden floors removed, old building.....	1
Wire screening used..... square feet..	3,560
Buildings razed.....	2

WATER FRONT.

Vessels inspected and histories recorded....	4
Vessels fumigated.....	2
Sulphur used..... pounds..	3,100
Rat guards installed.....	8
Defective rat guards repaired.....	14
Canal Zone certificates issued.....	2
Port sanitary statements issued.....	42

LABORATORY AND RODENT OPERATIONS.

Dead rodents received.....	22
Rodents trapped and killed.....	364
Total.....	386

Rodents examined for plague infection.....	309
Rodents proven plague infected.....	0
Blocks poisoned.....	15
Poison distributed..... pounds..	42

CLASSIFICATION OF RODENTS.

Mus rattus.....	8
Mus alexandrinus.....	92
Mus norvegicus.....	230
Mus musculus.....	56

The usual day and night patrol was maintained to enforce rat guarding and fending.

Rodents examined in Tacoma.

Mus norvegicus found dead.....	5
Mus norvegicus trapped.....	3
Total.....	8
Rodents examined for plague infection.....	8
Rodents proven plague infected.....	0

HAWAII.

The following reports of plague-eradication work in Hawaii have been received from Surg. Trotter, of the United States Public Health Service:

Honolulu.

WEEK ENDED JAN. 2, 1915.

Total rats and mongoose taken.....	381	Classification of rats trapped:	
Rats trapped.....	373	Mus alexandrinus.....	193
Mongoose trapped.....	7	Mus musculus.....	133
Rats killed by sulphur dioxide.....	1	Mus norvegicus.....	38
Examined microscopically.....	317	Mus rattus.....	9
Showing plague infection.....	0	Classification of rats killed by sulphur dioxide:	
		Mus musculus.....	1

WEEK ENDED JAN. 9, 1915.

Total rats and mongoose taken.....	475	Classification of rats killed by sulphur dioxide:	
Rats trapped.....	451	Mus alexandrinus.....	6
Mongoose trapped.....	14	Mus norvegicus.....	1
Rats killed by sulphur dioxide.....	10	Mus rattus.....	3
Examined microscopically.....	393	Average number of traps set daily.....	1,085
Showing plague infection.....	0	Cost per rat destroyed.....	17½
Classification of rats trapped:		Last case rat plague Aiea, 9 miles from Honolulu,	
Mus alexandrinus.....	209	Apr. 12, 1910.	
Mus musculus.....	162	Last case human plague Honolulu, July 12, 1910.	
Mus norvegicus.....	50	Last case rat plague Kalepa stable, Paauhau, Ha-	
Mus rattus.....	30	wali, Aug. 29, 1914.	
		Last case human plague Paauhau Landing, Hawaii,	
		Aug. 17, 1914.	

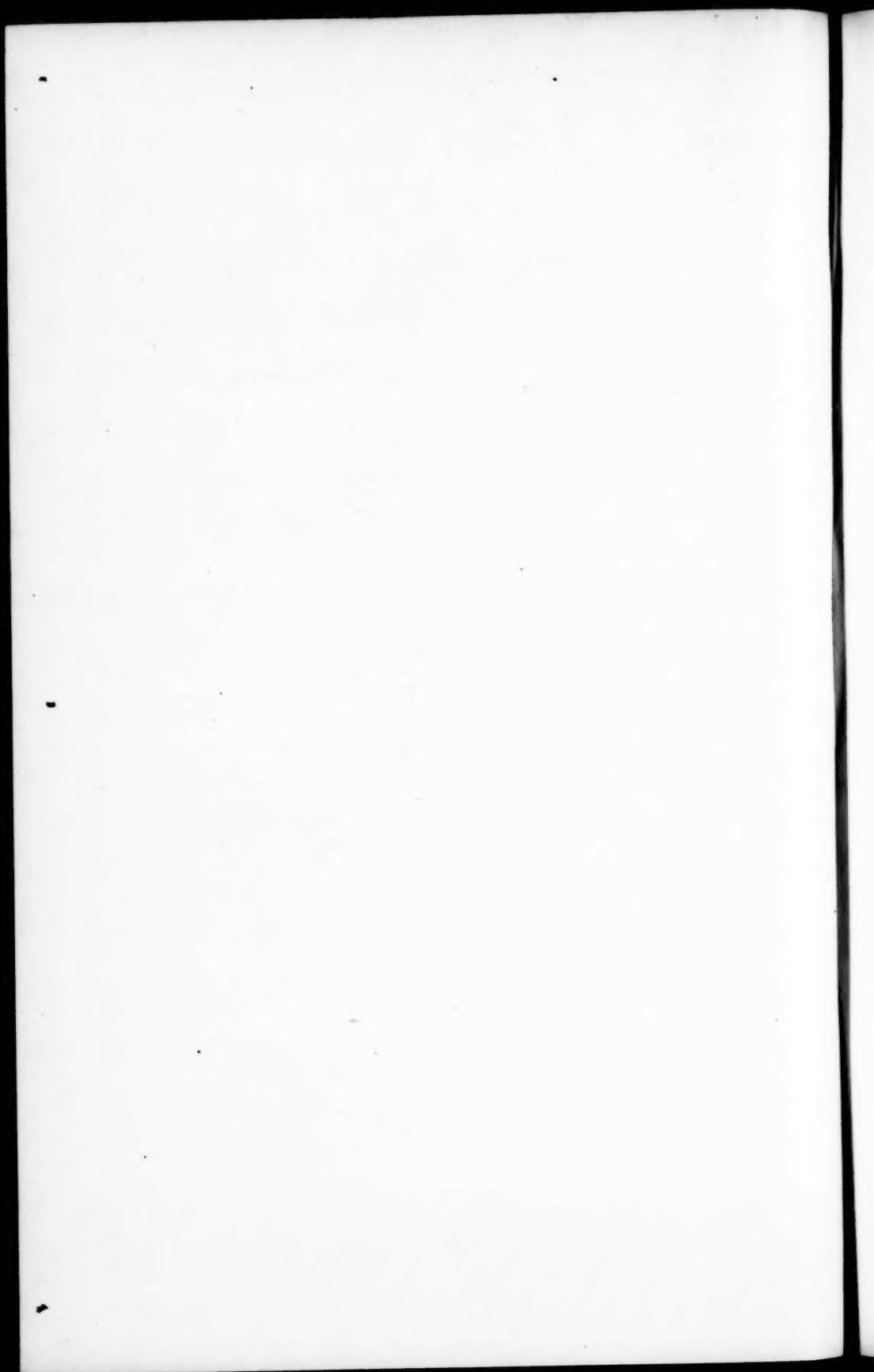
Hilo.

WEEK ENDED DEC. 26, 1914.

Rats and mongoose taken.....	2,077	Rats and mongoose plague infected.....	0
Rats trapped.....	2,062	Classification of rats trapped and found dead:	
Rats found dead.....	23	Mus norvegicus.....	470
Mongoose taken.....	22	Mus alexandrinus.....	219
Rats and mongoose examined macroscopically.....	2,077	Mus rattus.....	546
		Mus musculus.....	820

WEEK ENDED JAN. 2, 1915.

Rats and mongoose taken.....	1,719	Classification of rats trapped and found dead:	
Rats trapped.....	1,691	Mus norvegicus.....	346
Rats found dead.....	10	Mus alexandrinus.....	218
Mongoose taken.....	18	Mus rattus.....	422
Rats and mongoose examined macroscopically.....	1,719	Mus musculus.....	715
Rats and mongoose plague infected.....	0	Last case of rat plague, Paauhau Sugar Co.,	
		Aug. 29, 1914.	
		Last case of human plague, Paauhau Sugar	
		Co., Aug. 16, 1914.	



PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

IN CERTAIN STATES AND CITIES.

RECIPROCAL NOTIFICATION.

Minnesota.

Cases of communicable diseases referred during December, 1914, to other State or provincial health departments, by the Division of Preventable Diseases of the Minnesota State Board of Health.

Disease and locality of notification.	Referred to health authority of—	Why referred.
Smallpox: Mankato, Blue Earth County.	Lake Park, Dickinson County, Iowa.	Contracted smallpox from a boy who was visiting from Lake Park, Iowa.
Tuberculosis: Pokegama, Pine County. Madison, Lac Qui Parle County.	Chicago, Cook County, Ill... Aibee, Grant County, S. Dak.	Left Pokegama for Chicago, Ill. Present residence, Aibee, S. Dak.
Typhoid fever: Shakopee, Scott County...	Denzil, Saskatchewan, Canada.	Lived in Denzil three weeks previous to first symptoms. Contracted typhoid fever from daughter, who died Nov. 9, 1914.
Hendricks, Lyon County.	Brookings County, S. Dak...	Present residence, Brookings County, S. Dak.
Park Rapids, Hubbard County.	Lily, Day County, S. Dak...	Three weeks previous to earliest symptoms, patient was farming near Lily, S. Dak.

CEREBROSPINAL MENINGITIS.

Virginia—Pardee.

The State Commissioner of Health of Virginia reported January 23, 1915, that cerebrospinal meningitis had been reported prevalent at Pardee, Wise County, Va., and that several deaths had resulted from the disease.

CEREBROSPINAL MENINGITIS—Continued.

State Reports for December, 1914.

Places.	New cases reported.	Places.	New cases reported.
Indiana:		Ohio:	
Allen County.....	1	Belmont County—	
Marion County.....	4	Bellaire.....	1
Total.....	5	Butler County—	
Kansas:		Middletown.....	1
Brown County.....	1	Cuyahoga County—	
Chase County.....	1	Cleveland.....	1
Chautauqua County.....	1	Hamilton County—	
Total.....	3	Cincinnati.....	5
Louisiana:		Summit County—	
Ascension Parish.....	2	Akron.....	1
Caldwell Parish.....	1	Total.....	9
Richland Parish.....	1	South Carolina:	
Total.....	4	Chester County.....	1
		Spartanburg County.....	2
		Total.....	3
		Washington:	
		Spokane County—	
		Spokane.....	1

Texas Report for August, 1914.

The State Board of Health of Texas reported that during the month of August, 1914, 1 case of cerebrospinal meningitis had been reported in Williamson County, Tex.

City Reports for Week Ended Jan. 9, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md.....		1	Los Angeles, Cal.....	1	1
Boston, Mass.....	1		Lowell, Mass.....	2	2
Brockton, Mass.....	1	1	Worcester, Mass.....		1
Chicago, Ill.....	2				

DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 338.

ERYSIPELAS.

City Reports for Week Ended Jan. 9, 1915.

Places	Cases.	Deaths.	Places	Cases.	Deaths.
Alameda, Cal.....	1		Newark, N. J.....		1
Baltimore, Md.....		1	New Castle, Pa.....	1	
Boston, Mass.....		1	New York, N. Y.....		8
Brockton, Mass.....	1		Norristown, Pa.....	1	
Buffalo, N. Y.....	10		Oakland, Cal.....	1	1
Chicago, Ill.....	29	3	Passaic, N. J.....	1	
Cincinnati, Ohio.....	5		Philadelphia, Pa.....	15	2
Cleveland, Ohio.....	5	1	Pittsburgh, Pa.....	13	1
Clinton, Mass.....	1		Portland, Oreg.....	1	
Dayton, Ohio.....	2	1	Providence, R. I.....		1
Detroit, Mich.....	2	1	Reading, Pa.....	1	
Erie, Pa.....	3		Rock Island, Ill.....	1	
Harrisburg, Pa.....	2		Rochester, N. Y.....	5	1
Hartford, Conn.....	1		St. Louis, Mo.....	9	1
Kalamazoo, Mich.....	1		San Francisco, Cal.....	8	
Key West, Fla.....	1		Schenectady, N. Y.....	1	1
Lancaster, Pa.....	2		York, Pa.....	1	
Los Angeles, Cal.....	4	1			

GONORRHEA.**Louisiana Report for December, 1914.**

Collaborating Epidemiologist Dowling reported that during the month of December, 1914, 16 cases of gonorrhea had been notified in the State of Louisiana.

LEPROSY.**Texas—Parkland Hospital, Dallas.**

The State Board of Health of Texas reported that during the month of September, 1914, a case of leprosy had been notified at the Parkland Hospital, Dallas, Tex. The case occurred in a man, J. R., aged 58, nativity Kentucky, and terminated fatally September 11, 1914.

MALARIA.**State Reports for December, 1914.**

Places.	New cases reported.
South Carolina.....	7
Virginia.....	323

MEASLES.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 338.

PELLAGRA.**State Reports for December, 1914.**

Places.	New cases reported.
Kansas.....	3
Louisiana.....	2
South Carolina.....	1
Virginia.....	21

PNEUMONIA.**City Reports for Week Ended Jan. 9, 1915.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Alameda, Cal.....	1	.....	New Castle, Pa.....	2	.....
Binghamton, N. Y.....	11	3	Newport, Ky.....	1	1
Chicago, Ill.....	143	89	Norfolk, Va.....	1	1
Cleveland, Ohio.....	31	13	Pasadena, Cal.....	1	1
Detroit, Mich.....	1	17	Pascagoula, Miss.....	1	.....
Duluth, Minn.....	2	2	Philadelphia, Pa.....	67	77
Dunkirk, N. Y.....	1	.....	Reading, Pa.....	1	1
Erie, Pa.....	2	.....	Rochester, N. Y.....	8	8
Galesburg, Ill.....	3	3	Sacramento, Cal.....	1	.....
Grand Rapids, Mich.....	4	1	San Diego, Cal.....	1	1
Harrisburg, Pa.....	1	2	Schenectady, N. Y.....	5	1
Kalamazoo, Mich.....	5	1	Wilmington, N. C.....	1	1
Lancaster, Pa.....	1	.....	York, Pa.....	1	.....
Los Angeles, Cal.....	22	16			

POLIOMYELITIS (INFANTILE PARALYSIS).**State Reports for December, 1914.**

Places.	New cases reported.	Places.	New cases reported.
Indiana:		South Carolina:	
Allen County.....	1	Horry County.....	3
Kansas:		Laurens County.....	2
Allen County.....	1	Total.....	5
Ellsworth County.....	1		
Marion County.....	1	Virginia:	
Reno County.....	1	Allemaire County.....	1
Total.....	4	Bedford County.....	1
Louisiana:		Green County.....	2
Rapides Parish.....	1	Lee County.....	1
St. Martin Parish.....	1	Loudoun County.....	1
Total.....	2	Mecklenburg County.....	1
		Nansemond County.....	3
Ohio:		Orange County.....	1
Jackson County.....	1	Pittsylvania County.....	1
Pickaway County.....	1	Rockingham County.....	1
Summit County.....	1	Smyth County.....	3
Akron.....	1	Wythe County.....	1
Total.....	3	Total.....	17

Texas Reports for August and September, 1914.

The State board of health reported that during the month of August, 1914, poliomyelitis had been notified in Texas as follows: Denton County, 1 case; Montgomery County, 1 case; Wharton County, 1 case, and that during the month of September 1 case had been notified in Jefferson County.

RABIES IN ANIMALS.**City Reports for Week Ended Jan. 9, 1915.**

During the week ended January 9, 1915, rabies in animals was notified by cities as follows: Everett, Wash., 3 cases in dogs; Phoenix, Ariz., 1 case in a dog.

SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 338.

SMALLPOX.**California—Imperial County.**

Acting Asst. Surg. Richter reported that during the week ended January 16, 1915, two cases of smallpox had been notified in Imperial County, Cal.

Acting Asst. Surg. Richter also reported by telegraph January 25, 1915, that during the week ended January 23, 1915, five cases of smallpox had been notified in Imperial County, Cal.

SMALLPOX—Continued.**Maryland—Cokesbury.**

Collaborating Epidemiologist Fulton reported by telegraph January 25, 1915, that a new focus of smallpox had been reported in Maryland, five cases of the disease having been notified at Cokesbury, Somerset County. The five cases all occurred in members of one family. The infection was contracted in Pocomoke City, Worcester County, Md.

Maryland—Marion.

Collaborating Epidemiologist Fulton reported by telegraph that on January 18, 1915, a new focus of smallpox infection had been reported in Maryland, two cases of the disease having been notified at Marion, Somerset County.

Tennessee—Chattanooga—Virulent Smallpox.

On January 14 Surg. Creel was ordered to proceed to Chattanooga, Tenn., to investigate the rumored prevalence of plague and smallpox at that place. January 16 he reported as follows regarding the situation:

There is no evidence of plague, but smallpox of an unusually virulent type prevails in Chattanooga. There has been smallpox in the city during the winter months for several years past, but the mortality of such cases has been nil in previous years.

According to the monthly bulletin of the Chattanooga department of health, in December, 1913, there were 24 cases of smallpox, with no death; in January, 1914, 57 cases, with no death; in February, 1914, 80 cases, with no death. From January 1, 1912, to July 1, 1914, there was one death from smallpox in Chattanooga.

The present infection can be attributed to the case of N. L., who arrived at Chattanooga from El Paso, Tex., on November 9, suffering with a very severe case of smallpox, from which he died. Subsequent to his arrival two other cases of confluent smallpox developed in the same house. The total number of cases, from the original one in November to January 15, was 56, with 16 deaths, a fatality rate of 28.6 per cent. During December there occurred 38 cases, of which 13 died. From January 1 to 15 there were 15 cases, with 2 deaths. Most of the fatal cases have been of the hemorrhagic type. With the exception of the cases of varioloid, all have been of the hemorrhagic or confluent types.

The wife of the patient in the first case stated that her husband had worked in a construction camp outside of El Paso before coming to Chattanooga; that he felt ill during the progress of his journey, and stopped over a few hours at Montgomery and also at Birmingham. At the latter place he was feeling extremely ill, and was also very ill on arriving at Chattanooga, where the eruption was noticed the following morning.

SMALLPOX—Continued.

The virulence of the disease is shown in a case which was reported on the afternoon of January 15, while I was in conference with the health authorities. The case had terminated fatally, and with the city physician I inspected the corpse. The patient had been sick three days with initial symptoms of a chill, severe headache, and backache. The attending physician had treated him for influenza. Until the day of his death no eruption had developed, but on the morning of January 15 ecchymoses and petechiæ began to appear, and shortly afterwards he had severe hematuria, and died at noon. The body presented no evidence of macular or papular eruption. It was very frankly a case of purpura variolosa.

In talking with the commissioner of health I stated that if any of the neighboring towns were requiring certificates of vaccination from persons coming from Chattanooga they were perfectly justified in so doing.

The total number of cases to January 15, as previously stated, was 56. The estimated population of the city is 57,000, as of July 1, 1914. The severity of the disease has had the beneficial effect of stimulating the people to be vaccinated. The city authorities have used 15,000 vaccine points, I am told, and a large number has been used by private physicians. Vaccination is not compulsory in Chattanooga except in the schools, but a large number of commercial firms have instructed their employees that they would have to be vaccinated, or lose their positions. It is believed that the people of Chattanooga are sufficiently alarmed to cooperate with the health department in securing more general vaccination.

Virginia—Parksley

Surg. Cumming reported by telegraph January 27, 1915, that two cases of smallpox had been notified in Parksley, Accomac County, Va.

State Reports for December, 1914.

Places.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Michigan:						
Allegan County—						
Heath Township.....	3	.....	.....	.....	3	.....
Leitchon Township.....	4	.....	.....	.....	.....	.....
Allegan.....	8	.....	.....	1	7	.....
Cass County—						
Dowagiac.....	1	.....	.....	.....	1	.....
Dickinson County—						
Sacoma Township.....	5	.....	.....	.....	5	.....
Iron Mountain.....	3	.....	.....	.....	3	.....
Grand Traverse County—						
Paradise Township.....	15	.....	.....	.....	14	1

SMALLPOX—Continued.

State Reports for December, 1914—Continued.

Places.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Michigan—Continued.						
Houghton County—						
Franklin Township.....	1				1	
Houghton.....	1				1	
Lake Linden.....	3				3	
Ingham County—						
Leslie.....	1					1
Lansing.....	3				2	
Iron County—						1
Hematite Township.....	2				1	
Alpha Township.....	1			1		
Kent County—						
Grand Rapids.....	2				1	1
MacKinnac County—						
Newton Township.....	1				1	
Manistee County—						
Bear Lake Township.....	24				5	19
Brown Township.....	15				11	4
Marilla Township.....	2					2
Copemish.....	1				1	
Marquette County—						
Negaunee.....	2				2	
Menominee County—						
Cedarville Township.....	1				1	
Oakland County—						
Oakland Township.....	1					1
Oceana County—						
Colfax Township.....	7				7	
Hesperia.....	1				1	
Ottawa County—						
Holland Township.....	1				1	
St. Clair County—						
Riley Township.....	2				1	1
Marine City.....	1				1	
Port Huron.....	18				18	
Washtenaw County—						
Ann Arbor.....	1				1	
Wayne County—						
Northville.....	2				2	
Detroit.....	23				23	
Total.....	156			2	118	36
Minnesota:						
Blue Earth County—						
Mankato.....	5				3	2
Rapidan Township.....	2				2	
Shelby Township.....	2			1	1	
Sterling Township.....	2				2	
Brown County—						
New Ulm.....	5		1	2	2	
Sleepy Eye.....	7				3	4
Carlton County—						
Cloquet.....	13			1	4	8
Wrenshall Township.....	3				3	
Chippewa County—						
Kragero Township.....	3				1	2
Montevideo.....	6				3	3
Chisago County—						
Fish Lake Township.....	1					1
Cottonwood County—						
Bingham Lake.....	6					
Highwater Township.....	3		1		2	
Rose Hill Township.....	1				1	
Dakota County—						
Castle Rock Township.....	1					1
Goodhue County—						
Goodhue.....	1				1	
Hennepin County—						
Minneapolis.....	3				3	
Wayzata.....	1				1	

SMALLPOX—Continued.

State Reports for December, 1914—Continued.

Places.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Minnesota—Continued.						
Isanti County—						
Springvale Township.....	1					
Lac Qui Parle County—						
Lantho Township.....	1					1
Le Sueur County—						
Waterville.....	3					3
Lincoln County—						
Hope Township.....	4			2	2	
Lyon County—						
Lynn Township.....	1					
Martin County—						
Rolling Green Township.....	1					1
Murray County—						
Belfast Township.....	1				1	
Bonala Township.....	8			1	6	1
Fulda.....	8				8	
Lake Wilson.....	1				1	
Nicollet County—						
North Mankato.....	1				1	
Nobles County—						
Adrian.....	1				1	
Larkin Township.....	1				1	
Olmsted County—						
Eyota.....	1				1	
Dover Township.....	2				2	
Viola Township.....	1					1
Fine County—						
Rutledge.....	5				5	
Pipestone County—						
Altona Township.....	4				1	3
Jasper.....	8		4			4
Pipestone.....	1					1
Sweet Township.....	1					1
Troy Township.....	1					1
Woodstock.....	1				1	
Pope County—						
Glenwood.....	4				3	1
Lowry.....	1			1		
Minnewaska Township.....	5				3	
Ramsey County—						
St. Paul.....	17				17	
Redwood County—						
Lamberton.....	12				10	2
Lamberton Township.....	2					2
Sanborn.....	1				1	
Rice County—						
Northfield.....	1				1	
Rock County—						
Hills.....	1				1	
Rose Dell Township.....	10				10	
St. Louis County—						
Duluth.....	5			1	4	
Eveleth.....	1				1	
Scott County—						
Jordan.....	1				1	
Stearns County—						
North Fork Township.....	6			1	5	
Steele County—						
Owatonna.....	1					1
Swift County—						
Appleton.....	1		1			
Todd County—						
Browerville.....	2				2	
Hartford Township.....	1				1	
Yellow Medicine County—						
Clarksfield.....	1					1
Total.....	193		7	10	123	53

SMALLPOX—Continued.

State Reports for December, 1914—Continued.

Places.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Ohio:						
Allen County—						
Lima.....	1				1	
Ashtabula County.....	52				6	46
Belmont County.....	2				1	1
Carroll County.....	2					2
Champaign County.....	2				2	
Columbiana County.....	26			1	13	12
Crawford County—						
Bucyrus.....	1			1		
Cuyahoga County.....	4					4
Darke County.....	2					2
Erie County.....	27				23	4
Hardin County.....	8				3	5
Knox County.....	17	1			14	3
Lake County.....	9				2	7
Lawrence County.....	1					1
Mahoning County—						
Youngstown.....	1				1	
Marion County.....	11				1	10
Paulding County.....	5					5
Sandusky County—						
Fremont.....	8			2	4	2
Seneca County—						
Postoria.....	12			1	8	3
Stark County.....	69	1	1	3	54	11
Tuscarawas County.....	5				5	
Wayne County.....	9					9
Wood County.....	10					10
Wyandot County.....	44		1		5	38
Totals.....	328	2	2	8	143	175

Miscellaneous State Reports.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Indiana (Dec. 1-31):			Indiana (Dec. 1-31)—Contd.		
Counties—			Counties—		
Adams.....	4		Montgomery.....	5	
Blackford.....	18	1	Orange.....	1	
Boone.....	9		Porter.....	1	
Clark.....	13		Posey.....	45	
Clinton.....	26		Randolph.....	2	
DeKalb.....	1		Scott.....	4	
Delaware.....	53		Shelby.....	2	
Dubois.....	8		Starke.....	1	
Elkhart.....	2		Sullivan.....	5	
Fayette.....	10		Tippecanoe.....	3	
Gibson.....	3		Vanderburg.....	9	
Grant.....	6		Vigo.....	1	
Henry.....	1		Washington.....	6	
Huntington.....	4				
Jasper.....	3		Total.....	392	1
Jay.....	21				
Jefferson.....	32		Kansas (Dec. 1-31):		
Jennings.....	1		Counties—		
Johnson.....	5		Anderson.....	1	
Knox.....	33		Barton.....	2	
Lagrange.....	20		Butler.....	25	
Lake.....	12		Chase.....	1	
Madison.....	14		Cherokee.....	23	
Martin.....	8		Comanche.....	19	

SMALLPOX—Continued.

Miscellaneous State Reports—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Kansas (Dec. 1-31)—Contd.			Texas (Aug. 1-31)—Contd.		
Counties—			Counties—		
Cowley.....	1		Palo Pinto.....	2	
Crawford.....	1		Williamson.....	1	
Elk.....	1		Total.....	15	
Finney.....	16				
Franklin.....	1		Texas (Sept. 1-30):		
Gray.....	1		Counties—		
Greenwood.....	1		Parker.....	5	
Harper.....	97		Van Zant.....	3	
Kingman.....	1		Total.....	8	
Kiowa.....	2				
Lane.....	2		Texas (Oct. 1-31):		
McAlester.....	1		Counties—		
Missouri.....	1		Dallas.....	2	1
Montgomery.....	3		Grayson.....	1	
Ottawa.....	2		Midland.....	1	
Pawnee.....	1		Williamson.....	1	
Pratt.....	69		Total.....	5	1
Rawlins.....	6				
Reno.....	1		Texas (Nov. 1-30):		
Rice.....	1		Counties—		
Scott.....	3		Dallas.....	4	
Sedgewick.....	26		Fisher.....	31	
Shawnee.....	1		Haskell.....	2	
Stafford.....	4		Hidalgo.....	2	
Sumner.....	13		Lee.....	1	
Wallace.....	2		Matagorda.....	3	
Total.....	329		Navarro.....	6	
			Smith.....	13	
Louisiana (Dec. 1-31):			Tarrant.....	2	
Parishes—			Williamson.....	9	
Acadia.....	119		Total.....	73	
Beauregard.....	1				
Bienville.....	1		Virginia (Dec. 1-31):		
Caldo.....	1		Counties—		
Calcasieu.....	1		Accomac.....	1	
Jeff Davis.....	17		Brunswick.....	7	
St. Landry.....	1		Buchanan.....	8	
St. Tammany.....	3		Culpeper.....	1	
Vermilion.....	9		Cumberland.....	1	
Total.....	143		Dickenson.....	13	
			Fairfax.....	1	
North Dakota (Dec. 1-31):			Giles.....	5	
Counties—			Lancaster.....	8	
Adams.....	2		Lincoln.....	24	
Bottineau.....	1		Mecklenburg.....	16	
Bowman.....	1		Montgomery.....	1	
Burke.....	1		Nelson.....	4	
Emmons.....	1		Nottoway.....	1	
Grand Forks.....	1		Roanoke.....	1	
McHenry.....	25		Tazewell.....	1	
Nelson.....	11		Wythe.....	8	
Pembina.....	32		Total.....	95	
Walsh.....	3				
Ward.....	2		Wyoming (May 1-31):		
Total.....	80		Counties—		
			Goshen.....	1	
South Carolina (Dec. 1-31):			Jelison.....	4	
Counties—			Natrona.....	2	
Calhoun.....	4		Total.....	7	
Colleton.....	4				
Greenville.....	1		Wyoming (June 1-30):		
Orangeburg.....	9		County—		
Richland.....	11		Carbon.....	2	
Total.....	29				
			Wyoming¹ (July 1-31):		
Texas (Aug. 1-31):			County—		
Counties—			Goshen.....	11	
Cameron.....	1				
Galveston.....	1		Wyoming (Oct. 1-31):		
Hamilton.....	2		County—		
Hansford.....	5		Jefferson.....	3	
Jehnsen.....	2				
Kleburg.....	1				

¹ August, September, November, and December, no case.

SMALLPOX—Continued.

City Reports for Week Ended Jan. 9, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Ann Arbor, Mich.	2	.....	Los Angeles, Cal.	2	.....
Bellingham, Wash.	2	.....	Milwaukee, Wis.	18	.....
Butte, Mont.	1	.....	Moline, Ill.	1	.....
Charleston, S. C.	5	.....	Muncie, Ind.	6	.....
Chicago, Ill.	1	.....	Nashville, Tenn.	3	.....
Cleveland, Ohio.	2	.....	New Orleans, La.	1	.....
Covington, Ky.	8	.....	Portland, Oreg.	2	.....
Detroit, Mich.	4	.....	Racine, Wis.	4	.....
Erie, Pa.	4	.....	Rochester, N. Y.	1	.....
Evansville, Ind.	2	.....	St. Louis, Mo.	9	.....
Galesburg, Ill.	1	.....	Salt Lake City, Utah.	5	.....
Grand Rapids, Mich.	3	.....	San Diego, Cal.	1	.....
Kansas City, Kans.	1	.....	Springfield, Ohio.	1	.....
La Crosse, Wis.	1	.....		

SYPHILIS.

Louisiana Report for December, 1914.

Collaborating Epidemiologist Dowling reported that during the month of December, 1914, 18 cases of syphilis had been notified in the State of Louisiana.

TETANUS.

City Reports for Week Ended Jan. 9, 1915.

During the week ended January 9, 1915, tetanus was notified by cities as follows: Baltimore, Md., 1 death; Chicago, Ill., 1 death; Lowell, Mass., 1 case; Philadelphia, Pa., 1 case with 1 death.

TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 333.

TYPHOID FEVER.

State Reports for December, 1914.

Places.	New cases reported.	Places.	New cases reported.
Indiana:		Indiana—Continued.	
Adams County	3	Monroe county	4
Cass County	20	Montgomery county	4
Clark County	10	Parke County	7
Clinton County	6	Pike County	4
Daviess County	1	Porter County	1
Decatur County	2	Posey County	8
Dekalb County	3	Pulaski County	7
Delaware County	1	Putnam County	1
Fulton County	1	Randolph County	1
Gibson County	1	Scott County	3
Henry County	2	St. Joseph County	4
Howard County	1	Sullivan County	5
Huntington County	1	Switzerland County	2
Jefferson County	1	Tippecanoe County	4
Jennings County	1	Tipton County	1
Johnson County	1	Vanderburg County	4
Knox County	3	Wabash County	1
Kosciusko County	1	Warrick County	1
Lake County	4	Washington County	5
Laporte County	1	White County	2
Lawrence County	1		
Marion County	16	Total	132
Miami County	2		

TYPHOID FEVER—Continued.

State Reports for December, 1914—Continued.

Places.	New cases reported.	Places.	New cases reported.
Kansas:		Michigan—Continued.	
Alien County.....	2	Genesee County—	
Anderson County.....	1	Grand Blanc Township.....	1
Atchison County—		Flint.....	7
Atchison.....	1	Gladwin County—	
Barton County.....	1	Puckeye Township.....	1
Bourbon County.....	1	Gratiot County—	
Fort Scott.....	1	Lafayette Township.....	1
Brown County.....	4	Hillsdale County—	
Butler County.....	3	Cambria Township.....	1
Chase County.....	3	Hillsdale.....	1
Cherokee County.....	3	Huron County—	
Cloud County.....	1	Dwight Township.....	1
Comanche County.....	1	Ingham County—	
Cowley County.....	4	Onondaga Township.....	1
Crawford County.....	1	Ionia County—	
Douglas County.....	7	Danby Township.....	1
Douglas.....	2	Portland.....	1
Elk County.....	2	Iron County—	
Ellis County.....	1	Crystal Falls.....	1
Ellsworth County.....	2	Jackson County—	
Ford County.....	2	Jackson.....	2
Franklin County.....	1	Kalkaska County—	
Gray County.....	1	Springfield Township.....	1
Greenwood County.....	2	Kent County—	
Harper County.....	2	Grattan Township.....	1
Jewell County.....	1	Cedar Springs.....	1
Kearney County.....	4	Grand Rapids.....	4
Kiowa County.....	1	Lake County—	
Leavenworth County.....	2	Luther.....	1
Lyon County.....	2	Mackinac County—	
Marshall County.....	2	Mackinac Island.....	1
McPherson County.....	1	Manistee County—	
Montgomery County.....	7	Arcadia Township.....	1
Colleyville.....	5	Marquette County—	
Morris County.....	1	Marquette.....	2
Nemaha County.....	2	Negaunee.....	1
Neosho County.....	1	Menominee County—	
Pawnee County.....	2	Menominee.....	2
Reno County.....	1	Midland County—	
Hutchinson.....	2	Midland.....	1
Rice County.....	1	Monroe County—	
Riley County.....	7	Monroe.....	7
Seward County.....	1	Muskegon County—	
Shawnee County.....	2	Muskegon.....	1
Topeka.....	1	Eginaw County—	
Sumner County.....	5	Saginaw.....	3
Washington County.....	2	St. Clair County—	
Wilson County.....	17	Port Huron.....	1
Woodson County.....	2	Wayne County—	
Wyandotte County—		Trenton.....	3
Kansas City.....	3	Detroit.....	25
Total.....	124	Total.....	87
Louisiana:		Minnesota:	
Caddo Parish.....	12	Aitkin County—	
Caldwell Parish.....	2	Aitkin Township.....	1
Caliborne Parish.....	3	Anoka County—	
De Soto Parish.....	1	Anoka.....	1
Iberville Parish.....	1	Beltrami County—	
Livingston Parish.....	1	Berriidji.....	2
Plaquemine Parish.....	1	Blue Earth County—	
Red River Parish.....	2	Lime Township.....	1
Total.....	23	Mankato.....	2
Michigan:		Brown County—	
Allegan County—		New Ulm.....	1
Salem Township.....	1	Carver County—	
Alpena County—		Benton Township.....	1
Alpena.....	8	Cass County—	
Barry County—		Walden Township.....	1
Assyria Township.....	1	Cottonwood County—	
Berrien County—		Great Bend Township.....	1
Benton Township.....	1	Dakota County—	
Eaton County—		Randolph Township.....	1
Eaton Rapids.....	1	Faribault County—	
		Bricelyn.....	1

TYPHOID FEVER—Continued.

State Reports for December, 1914—Continued.

Places.	New cases reported.	Places.	New cases reported.
Minnesota—Continued.		North Dakota—Continued.	
Hennepin County—		McLean County—	2
Minneapolis—	24	Pierce County—	1
Robbinsdale—	1	Ransom County—	11
Hubbard County—		Rolette County—	4
Akeley Township—	1	Sargent County—	4
Itasca County—		Ward County—	2
Bovey—	1	Williams County—	2
Jackson County—		Total—	41
Alpha—	2		
Kanabec County—		Ohio:	
Mora—	1	Adams County—	4
Lake County—		Allen County—	2
Two Harbors—	1	Auglaie County—	1
Le Sueur County—		Belmont County—	7
Kilkenny—	1	Brown County—	1
Millie Laas County—		Champaign County—	
Milo Township—	2	Urbana—	2
Mower County—		Clark County—	
Evada Township—	1	Springfield—	3
Nicollet County—		Clermont County—	3
St. Peter—	2	Columbiana County—	7
Olmsted County—		Coshocton County—	
Rochester—	1	Coshocton—	1
Otter Tail County—		Crawford County—	2
Fergus Falls—	2	Cuyahoga County—	30
Underwood—	1	Darke County—	1
Pennington County—		Defiance County—	2
Thief River Falls—	2	Delaware County—	12
Pipestone County—		Erie County—	
Pipestone—	1	Sandusky—	3
Polk County—		Franklin County—	3
Crookston—	1	Fulton County—	1
Pope County—		Gallia County—	5
Holt Township—	1	Guernsey County—	4
Ramsey County—		Hamilton County—	13
St. Paul—	9	Hancock County—	3
Redwood County—		Hardin County—	2
North Hero Township—	1	Holmes County—	1
Rice County—		Huron County—	2
Faribault—	1	Jackson County—	12
St. Louis County—		Licking County—	
Biwabik—	1	Newark—	2
Duluth—	4	Logan County—	
Ely—	1	Bellefontaine—	1
Virginia—	1	Lorain County—	
Scott County—		Lorain—	6
Belle Plaine Borough—	4	Lucas County—	6
Sand Creek Township—	1	Madison County—	1
Shakopee—	1	Masoning County—	6
Stearns County—		Marion County—	1
Ashley Township—	1	Medina County—	5
St. Cloud—	1	Mercer County—	6
Stevens County—		Miami County—	2
Donnelly—	1	Monroe County—	1
Swift County—		Montgomery County—	
Appleton—	1	Dayton—	8
Benson—	1	Muskingum County—	7
Winona County—		Ottawa County—	1
Lewiston—	1	Paulding County—	2
Winona—	4	Perry County—	1
Wright County—		Pickaway County—	4
Cokato—	1	Portage County—	1
Yellow Medicine County—		Preble County—	8
Canby—	2	Putnam County—	3
Total—	96	Richland County—	7
		Ross County—	1
North Dakota:		Sandusky County—	3
Adams County—	1	Scioto County—	6
Barnes County—	2	Seneca County—	
Benson County—	1	Tiffin—	1
Billings County—	1	Shelby County—	
Bowman County—	3	Sidney—	1
Burke County—	1	Stark County—	4
Foster County—	1	Summit County—	9
Golden Valley County—	3	Trumbull County—	2
Griggs County—	2	Warren County—	1

TYPHOID FEVER—Continued.

State Reports for December, 1914—Continued.

Places.	New cases reported.	Places.	New cases reported.
Ohio—Continued.		Virginia—Continued.	
Washington County	1	King and Queen County	2
Wood County	2	Lancaster County	3
Wyandot County	1	Lee County	3
Total	238	Loudoun County	4
South Carolina:		Lunenburg County	1
Abbeville County	1	Mathews County	1
Aiken County	1	Mecklenburg County	3
Beaufort County	1	Middlesex County	3
Charleston County	1	Montgomery County	2
Cherokee County	1	Nansemond County	2
Greenville County	5	Norfolk County	4
Horry County	1	Norfolk	7
Laurens County	3	Northampton County	7
Richland County	2	Northumberland County	2
Sumter County	2	Nottoway County	1
Union County	1	Pulaski County	5
York County	1	Rappahannock County	1
Total	20	Richmond County	2
Virginia:		Roanoke County	2
Accomac County	5	Roanoke	6
Albemarle County	1	Rockingham County	6
Alleghany County	1	Russell County	2
Amherst County	2	Scott County	8
Augusta County	2	Shenandoah County	2
Bedford County	5	Smyth County	1
Buchanan County	2	Southampton County	6
Buckingham County	1	Spotsylvania County	2
Campbell County	2	Sussex County	3
Lynchburg	3	Tazewell County	5
Caroline County	2	Washington County	2
Carroll County	1	Wise County	30
Clarke County	4	Wythe County	4
Dinwiddie County	4	Total	211
Elizabeth City County	4	Washington:	
Fauquier County	2	Benton County	1
Floyd County	2	Chatham County	1
Franklin County	1	Columbia County	8
Frederick County	1	Jefferson County	1
Giles County	1	King County	1
Greensville County	4	Seattle	8
Halifax County	4	Kittitas County	5
Hanover County	3	Pierce County	2
Henrico County	11	Skagit County	4
Richmond	5	Snohomish County	2
Henry County	1	Everett	4
Highland County	1	Spokane County	5
Isle of Wight County	2	Spokane	5
James City County	1	Walla Walla County	5
King George County	2	Whateam County	4
		Total	50

Texas Reports for August, September, October, and November, 1914.

Places.	New cases reported.	Places.	New cases reported.
August:		August—Continued.	
Childress County—		Hale County	1
Childress	2	Hamilton County	1
Coleman County—		Hansford County	1
Coleman	3	Henderson County	4
Comal County	2	Johnson County—	
New Braunfels	1	Cleburne	2
Dallas County—		Matagorda County	2
Dallas	40	Menard County—	
Galveston County—		Menard	3
Galveston	5	Montague County—	
Grayson County—		Bowie	2
Whitesboro	4		

TYPHOID FEVER—Continued.

Texas Reports for August, September, October, and November—Continued.

Places.	New cases reported.	Places.	New cases reported.
August—Continued.		October—Continued.	
Navarro County—		Burnet County—	1
Corsicana—	5	Burnet—	5
Parker County—	2	Coleman County—	
Potter County—		Dallas County—	32
Amarillo—	2	Dallas—	
Reeves County—		Denton County—	
Pecos—	2	Denton—	2
Tarrant County—		Donley County—	
Fort Worth—	26	Clarendon—	2
Travis County—		Floyd County—	
Austin—	3	Lockney—	2
Van Zandt County—	2	Galveston County—	
Williamson County—	2	Galveston—	5
Wise County—		Hale County—	1
Bridgeport—	1	Haskell County—	
Total—	125	Haskell—	6
September:		Johnson County—	
Archer County—	2	Cleburne—	2
Childress County—		Montague County—	
Childress—	5	Bowie—	4
Coleman County—		Moore County—	
Coleman—	1	Dumas—	2
Comal County—	1	Parker County—	1
New Braunfels—	1	Tarrant County—	
Cooke County—		Fort Worth—	9
Gainesville—	4	Travis County—	
Dallas County—		Austin—	3
Dallas—	53	Van Zandt County—	1
Galveston County—		Total—	79
Galveston—	5	November:	
Gonzales County—		Bowie County—	
Gonzales—	1	Texarkana—	1
Grayson County—		Coleman County—	
Whitesboro—	1	Coleman—	1
Hall County—		Comal County—	1
Memphis—	11	New Braunfels—	1
Henderson County—		Dallas County—	
Athens—	2	Dallas—	6
Menard County—		Galveston County—	
Menard—	4	Galveston—	6
Montague County—		Hidalgo County—	1
Bowie—	2	Johnson County—	
Navarro County—		Cleburne—	6
Corsicana—	6	La Salle County—	1
Reeves County—	9	Midland County—	1
Stephens County—	1	Moore County—	2
Tarrant County—		Reeves County—	1
Fort Worth—	19	Tarrant County—	
Uvalde County—		Fort Worth—	8
Uvalde—	1	Polytechnic—	2
Van Zandt County—		Travis County—	
Waller County—	5	Austin—	1
Wharton County—		Van Zandt County—	2
Klatampo—	1	Edgewood—	1
Wise County—	1	Williamson County—	
Total—	111	Taylor—	1
October:		Wise County—	
Bowie County—		Bridgeport—	3
Texarkana—	1	Wood County—	2
		Total—	43

TYPHOID FEVER—Continued.

City Reports for Week Ended Jan. 9, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Altoona, Pa.	1	.....	Los Angeles, Cal.	5	.....
Auburn, N. Y.	1	.....	Lowell, Mass.	1	.....
Baltimore, Md.	18	5	Milwaukee, Wis.	1	.....
Boston, Mass.	10	1	Mobile, Ala.	2	.....
Buffalo, N. Y.	1	.....	Newark, N. J.	2	.....
Butte, Mont.	1	.....	New Bedford, Mass.	9	2
Camden, N. J.	1	.....	New Orleans, La.	7	1
Charleston, S. C.	5	1	Newport, R. I.	1	.....
Chicago, Ill.	20	6	New York, N. Y.	28	2
Cincinnati, Ohio.	4	1	Philadelphia, Pa.	7	2
Cleveland, Ohio.	5	2	Pittsburgh, Pa.	12	1
Colleyville, Kans.	1	.....	Providence, R. I.	4	1
Cumberland, Md.	1	.....	Reading, Pa.	5	.....
Dayton, Ohio.	6	.....	Richmond, Va.	6	.....
Duluth, Minn.	1	.....	Roanoke, Va.	1	1
Dunkirk, N. Y.	1	1	Rock Island, Ill.	1	.....
Erie, Pa.	2	.....	Sacramento, Cal.	1	1
Galveston, Tex.	2	.....	Saginaw, Mich.	1	.....
Grand Rapids, Mich.	1	.....	St. Louis, Mo.	8	1
Hartford, Conn.	1	.....	Salt Lake City, Utah.	2	1
Honolulu, T. H.	.....	2	Springfield, Mass.	.....	1
Jersey City, N. J.	.....	1	Superior, Wis.	1	.....
Kansas City, Kans.	2	.....	Toledo, Ohio.	4	1
Kokomo, Ind.	1	.....	Trenton, N. J.	1	.....
Lancaster, Pa.	1	.....	Washington, D. C.	5	1
Lexington, Ky.	.....	1	Wheeling, W. Va.	1	.....
Little Rock, Ark.	1	.....	Wilkes-Barre, Pa.	4	.....

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for December, 1914.

States.	Cases reported.			States.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
Indiana.....	436	221	520	North Dakota.....	24	10	23
Kansas.....	285	83	100	Ohio.....	1,037	567	966
Louisiana.....	10	5	3	South Carolina.....	143	2	19
Michigan.....	594	273	316	Virginia.....	352	.....	225
Minnesota.....	369	92	275	Washington.....	38	53	64

Texas Reports for August, September, October, and November, 1914.

Months.	Cases reported.			Months.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
August.....	52	.....	31	October.....	211	.....	139
September.....	94	.....	75	November.....	276	.....	170

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Jan. 9, 1915.

Cities.	Population as of July 1, 1914 (esti- mated by United States Census Bureau).	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tubercu- losis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md.	579,590	192	32	2	3		31		28	30
Boston, Mass.	733,802	252	74	7	97		69	1	61	31
Chicago, Ill.	2,393,325	658	139	23	58	3	80	2	144	73
Cleveland, Ohio.	639,431	159	38	3	6		18		27	11
Detroit, Mich.	537,650	176	48	1			16	3	29	19
New York, N. Y.	5,333,537	1,714	455	37	375	4	291	8	512	197
Philadelphia, Pa.	1,657,810	539	81	12	92	3	30	1	125	46
Pittsburgh, Pa.	564,878	159	33	7	97	1	57	1	39	10
St. Louis, Mo.	734,667	245	87	4	8		21		31	20
From 300,000 to 500,000 in- habitants:										
Buffalo, N. Y.	454,112	63	32		1		34	1	26	7
Cincinnati, Ohio.	402,175	151	30	3	1		7		34	21
Los Angeles, Cal.	438,914	135	11	1	36		23		35	19
Milwaukee, Wis.	417,054	90	30	3	5		25	2	21	1
Newark, N. J.	389,106	117	32		8		19		34	15
New Orleans, La.	361,221	155	41	5	2		2		40	24
San Francisco, Cal.	448,502	175	33	3	96		5		30	27
Washington, D. C.	353,378	134	9	1	13		16		27	16
From 200,000 to 300,000 in- habitants:										
Columbus, Ohio.	204,567	75	9				6		17	6
Jersey City, N. J.	293,921	74	27	2	2		13		20	5
Portland, Oreg.	260,601	6	6	1	3				4	3
Providence, R. I.	245,090	76	16	3	2	1	20		22	6
Rochester, N. Y.	241,518	55	16	1	32		8		6	3
From 100,000 to 200,000 in- habitants:										
Cambridge, Mass.	110,357	34	6	1	7		5		4	3
Camden, N. J.	107,465	9	9		20				6	
Dayton, Ohio.	173,794	43	4		13		8		5	4
Fall River, Mass.	125,443	5	5	2	22		12		4	4
Grand Rapids, Mich.	173,227	7	7		3		1		4	1
Hartford, Conn.	107,038	37	3	1			4		3	2
Lowell, Mass.	111,064	44	3		1				2	2
Nashville, Tenn.	114,899	52	4		1		4		4	4
New Bedford, Mass.	111,230	39	3	1	1		4	1	4	4
Oakland, Cal.	183,002	8	8	1	9		2		4	4
Reading, Pa.	103,351	31	3	1			4		5	2
Richmond, Va.	134,917	63	9		2		5		3	1
Salt Lake City, Utah.	109,530	39	7	2	1		4		6	4
Springfield, Mass.	100,375	28			1				2	4
Tacoma, Wash.	103,418		3		1		3		5	1
Toledo, Ohio.	184,176	58	11		12		2		1	
Trenton, N. J.	106,831	46	9	4	1		8		5	8
Worcester, Mass.	157,732	48	1				4		4	3
From 50,000 to 100,000 in- habitants:										
Altoona, Pa.	56,553	16	3				2			1
Atlantic City, N. J.	53,952	11	2				3			
Bayonne, N. J.	65,271	18	4				8		6	2
Binghamton, N. Y.	52,000	18	3				2		5	3
Brockton, Mass.	64,043	11	14						10	1
Charleston, S. C.	60,121	35	5	1			1			
Covington, Ky.	55,895	3					1			1
Duluth, Minn.	89,731	2					1			1
Erie, Pa.	72,401	30	3				4		3	
Evansville, Ind.	71,284	17	4		2		7		1	
Harrisburg, Pa.	69,493	14	5	1					5	
Johnstown, Pa.	64,742	14	4				5			1
Kansas City, Kans.	94,271	6							8	2
Little Rock, Ark.	53,811	21	1		12		5		1	
Lynn, Mass.	98,207	25	1	1			14		1	2
Mobile, Ala.	53,713	2							2	3
Norfolk, Va.	86,540	2							2	2
Pasadena, N. J.	66,276	22	1		1		1		3	
Pawtucket, R. I.	56,901	21	2			1				1
Saginaw, Mich.	53,088	12	5				5		3	
Schenectady, N. Y.	90,503	18	4		130	1	1		6	1
South Bend, Ind.	65,114	12					1			
Springfield, Ill.	57,972	26	2		44		9			2
Springfield, Ohio.	30,058	14	1	1			3		2	
Wilkes-Barre, Pa.	73,660	27	4		4		3		3	2

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Jan. 9, 1915—Continued.

Cities.	Population as of July 1, 1914 (esti- mated by United States Census Bureau).	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tubercu- losis.		
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
From 25,000 to 50,000 inhabit- ants:											
Alameda, Cal.	26,330				13		4				
Auburn, N. Y.	36,599	13					1				
Aurora, Ill.	35,022	8	1							1	
Austin, Tex.	33,218	11	7				3			3	
Bellingham, Wash.	29,937				1						
Brookline, Mass.	31,138	8	2		1		3		1		
Butte, Mont.	41,781	12			1				2	3	
Chelsea, Mass.	32,452	10	4				2		1	1	
Chicopee, Mass.	28,057	9	1					1	2	1	
Danville, Ill.	30,847	12	1				1				
East Orange, N. J.	39,852		1		1		7		4		
Elgin, Ill.	27,485	10								3	
Elmira, N. Y.	37,816		8		1		1		3		
Everett, Mass.	37,381	9			4				1		
Everett, Wash.	32,048	7					2				
Fitchburg, Mass.	40,507	11	6		2					1	
Galveston, Tex.	40,289	22	5				6			3	
Haverhill, Mass.	47,071	14	1		3		6		4	3	
Kalamazoo, Mich.	45,842	20	2		2				1	3	
La Crosse, Wis.	31,367	9					1		1	1	
Lancaster, Pa.	49,685		2				1		2		
Lexington, Ky.	38,819	31								2	
Lynchburg, Va.	31,830	11	1							3	
Malden, Mass.	48,979	14	8		6		3			1	
Medford, Mass.	25,240	8			7		5	1			
Moline, Ill.	26,402	7			4				1		
Newcastle, Pa.	39,569		1				5		1		
Newport, Ky.	31,517	12	3				6		2	2	
Newport, R. I.	29,134	4					2				
Newton, Mass.	42,455	12					3		1	2	
Niagara Falls, N. Y.	35,127	12								1	
Norristown, Pa.	30,265	8	3	1					1		
Orange, N. J.	31,968	14					1		4	1	
Pasadena, Cal.	40,580	17			2		2			2	
Perth Amboy, N. J.	38,265		5	1	3		1		4		
Racine, Wis.	44,528	9					2				
Roanoke, Va.	40,574	15	6	1	1		1		4	1	
Rock Island, Ill.	26,945						1		4	2	
Sacramento, Cal.	62,717	24	3		16		2			1	
San Diego, Cal.	48,900		7		1		2		3	3	
South Omaha, Nebr.	26,368	3									
Superior, Wis.	44,344	8	1							2	
Taunton, Mass.	35,631	17							2		
Waltham, Mass.	29,688	5			1						
West Hoboken, N. J.	40,647		4		1		3			2	
Wheeling, W. Va.	42,817	9	4						3	1	
Wilmington, N. C.	27,781	13	1							1	
York, Pa.	49,430		2				1		2		
Zanesville, Ohio.	29,949		1				1				
Less than 25,000 inhabitants:											
Ann Arbor, Mich.	14,948	10	3				2		5		
Beaver Falls, Pa.	13,100				1						
Cairo, Ill.	15,392	4	1		1						
Clinton, Mass.	13,075	4									
Concord, N. H.	22,291	8									
Cumberland Md.	23,546	13	1				2		1	1	
Dunkirk, N. Y.	19,607									1	
Florence, S. C.		1									
Harrison, N. J.	16,160								1		
Kearny, N. J.	21,967	7	1		3		4		2		
Ketchikan, Alaska.		2									
Key West, Fla.	21,150	3									
Kokomo, Ind.	19,094	4	1		1					1	
Marquette, Wis.	14,610	4	1				5		3		
Massillon Ohio.	14,912	4									
Melrose, Mass.	16,887	2	1		19		5				
Montclair, N. J.	24,782	1	1				2		3		
Morristown, N. J.	13,033	3									
Muncie, Ind.	24,969	6	1				1				
Muscatine, Iowa.	17,074	5									

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Jan. 9, 1915—Continued.

Cities.	Population as of July 1, 1914 (es- timated by United States Census Bureau).	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tubercu- losis.		
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
Less than 25,000 inhabitants— Continued.											
Nanticoke, Pa.	21,756	9	2		4				1		
Newburyport, Mass.	15,147	6	1							1	
New London, Conn.	20,557	6	2						1		
North Adams, Mass.	22,019	6					2				
Northampton, Mass.	19,766	6							1	1	
Palmer, Mass.	8,955	1									
Palo Alto, Cal.					7						
Phoenix, Ariz.	16,870	5				2				2	
Plainfield, N. J.	22,755	11			15		2				
Portsmouth, N. H.	11,538		1								
Rockland, Me.	8,182	1					2				
Rome, Ga.	14,146	2	1								
Rutland, Vt.	14,417	4	3				1			1	
Saratoga Springs, N. Y.	12,813	7	1						1	1	
Vineyard Haven, Mass.		2			12		4				
Wilkinsburg, Pa.	21,701	6	1		1				4	1	
Woburn, Mass.	15,755	5									

IN INSULAR POSSESSIONS.

PHILIPPINE ISLANDS.

Cholera Carriers—Manila.

Since the beginning of the outbreak of cholera in Manila stool examinations have been made regularly of the 3,000 or more prisoners who are confined in Bilibid Prison, Manila. These examinations were entirely negative for a month preceding November 30, 1914, when suddenly 20 cholera carriers were detected, and additional carriers are being found from day to day. The reappearance of cholera carriers in Bilibid remains unexplained. Prisoners before being admitted to the prison are placed in quarantine for a period of at least five days, and two cholera negative stool examinations are required. The records show that no cholera cases or carriers were detected among newcomers during that period.

Floods and Plague—Manila.

No cases of human or rat plague have been found in the city of Manila since September 12, 1914, in spite of the fact that approximately the same number of rats are being caught each week as heretofore. An interesting occurrence in this connection is the fact that on September 2, 1914, a flood occurred in Manila, during which many rats were drowned and many others were driven into the upper stories of houses, where they were killed. It is interesting to note that the last case of plague occurred just 10 days after the flood took place. The natural inference is that all plague rats were perhaps drowned, the plague link was broken, and the infection eradicated in consequence.

The last human case of plague occurred on September 12, 1914, and the last plague-infected rat was found August 30, 1914.

FOREIGN REPORTS.

CHINA.

Plague-Infected Rats—Shanghai.

During the two weeks ended December 19, 1914, 424 rats were examined at Shanghai. Thirteen plague-infected rats were found.

CUBA.

Communicable Diseases—Habana.

During the 10 days ended December 20, 1914, communicable diseases were notified in Habana as follows:

Diseases.	Cases.	Deaths.	Remain- ing under treat- ment.	Diseases.	Cases.	Deaths.	Remain- ing under treat- ment.
Diphtheria.....	8	2	7	Smallpox.....	1		4
Leprosy.....		1	259	Tetanus of the new born.....	1	1	
Malaria.....	1		1	Typhoid fever.....	20	5	102
Measles.....	3		1	Varicella.....	11		11
Paratyphoid fever..	5		21				
Scarlet fever.....	1		5				

ZANZIBAR.

Plague-Infected Rats—Zanzibar.

During the three weeks ended November 28, 1914, 2,573 rats were examined at Zanzibar for plague infection. Eleven plague-infected rats were found.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended Jan. 29, 1915.¹

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo.....	Sept. 5.....	1	1	
Dutch East Indies:				
Celebes—				
Menado.....	Nov. 8-21.....	73	70	
Java—				
Batavia.....	Nov. 15-28.....	67	53	
Sumatra—				
Lamong.....	Nov. 8-14.....	27	7	
Palembang.....	Nov. 8-21.....	32	25	
Telok Betong.....	Nov. 14-21.....	25	24	

¹ From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received During Week Ended Jan. 29, 1915—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Germany.....				Total Nov. 8-Dec. 26: Cases, 51.
Brandenburg.....	Dec. 6-23.....	4		Vicinity of Frankfort on the
Posen.....	Dec. 20-26.....	2		Oder.
Silesia.....	Nov. 8-Dec. 26.....	46		At Birnbaum.
India:				In 23 localities.
Bombay.....	Dec. 6-12.....	2		
Madras.....	do.....	6	6	
Indo-China:				
Saigon.....				And vicinity Nov. 24-30: Cases,
				39; deaths, 29.

PLAGUE.

Ceylon:				
Colombo.....	Nov. 30-Dec. 5.....	5	3	
India:				
Bombay.....	Nov. 22-Dec. 12.....	4	5	
Karachi.....	do.....	1	1	
Madras.....	do.....	6	6	
Indo-China:				
Saigon.....				And vicinity, Nov. 24-30: Cases,
				2.
Straits Settlements:				
Singapore.....	Nov. 22-28.....	2	2	
Turkey in Asia:				
Bagdad.....	Nov. 27-Dec. 3.....	11	7	

SMALLPOX.

Canada:				
Quebec.....	Jan. 11-16.....	1		
Toronto.....	Jan. 2-16.....	8		
Canary Islands:				
Teneriffe--				
Santa Cruz.....	Dec. 6-12.....		1	
Ceylon:				
Colombo.....	Nov. 8-Dec. 5.....	45	10	
China:				
Shanghai.....	Dec. 6-20.....	5	16	Deaths among natives.
Dutch East Indies:				
Borneo.....	Nov. 8-14.....	50	30	
Java.....				Total, Nov. 1-21: Cases, 1,800;
				deaths, 306, in the western part,
				including Batavia.
Batavia.....	Nov. 1-21.....	136	34	
Surabaya.....	Nov. 1-7.....	1		
Egypt:				
Alexandria.....	Dec. 3-23.....	26	9	
Greece:				
Patras.....	Dec. 14-20.....		1	
Saloniki.....	Dec. 6-19.....	14	17	
India:				
Bombay.....	Nov. 22-Dec. 12.....	36	7	
Calcutta.....	Nov. 15-28.....		25	
Madras.....	Nov. 22-Dec. 12.....	4	4	
Rangoon.....	Oct. 1-31.....	2	2	
Japan:				
Taiwan.....	Nov. 30-Dec. 5.....	1		
Mexico:				
Aguascalientes.....	Jan. 4-10.....		1	
Maratlan.....	Dec. 23-Jan. 5.....	9	4	
Tampico.....	Dec. 1-31.....		6	
Vera Cruz.....	Dec. 14-Jan. 10.....		8	
Russia:				
Moscow.....	Nov. 22-Dec. 5.....	8	1	
Spain:				
Madrid.....	Dec. 1-31.....	5		
Valencia.....	Dec. 28-Jan. 2.....	61	1	
Straits Settlements:				
Singapore.....	Nov. 8-28.....	3	1	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received During Week Ended Jan. 29, 1915—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Turkey in Asia:				
Beirut.....	Nov. 22-Dec. 12...	20	5	
Haifa.....	Nov. 1-Dec. 6.....	12	5	
Sweden:				
Stockholm.....	Dec. 13-19.....		1	
Zanzibar.....	Nov. 14-21.....		7	

Reports Received from Dec. 26, 1914, to Jan. 22, 1915.**CHOLERA.**

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Austria.....				Total Sept. 15-Dec. 5: Cases, 3,467; deaths, 937.
Bohemia.....				Total Sept. 23-Dec. 5: Cases, 176; deaths, 56.
Coast land—				
Trieste.....	Nov. 15-21.....	5		
Galicia.....				Total Sept. 23-Dec. 5: Cases, 2,917; deaths, 793.
Krakow.....	Oct. 4-Dec. 5.....	109	4	
Lisko.....	Sept. 23-Nov. 7.....	355	186	
Przemysl.....	Nov. 1-14.....	132	3	
Lower Austria.....				Total Sept. 1-Dec. 5: Cases, 473; deaths, 67.
Vienna.....	Sept. 1-Dec. 5.....	386	42	
Moravia.....				Total Sept. 15-Dec. 5: Cases, 362; deaths, 93.
Brunn.....	Sept. 15-Nov. 21.....	18	3	
Silesia.....				Total Sept. 23-Dec. 5: Cases, 288; deaths, 29.
Styria.....				Sept. 23-28: Cases, 55; deaths, 18.
Graz.....	Oct. 3-Nov. 14.....	10		
Upper Austria.....	Oct. 4-Nov. 7.....	3		
Bosnia-Herzegovina.....				Total Oct. 4-10: Case, 1.
Croatia-Slavonia.....				Total Oct. 4-10: Case, 1; death, 1.
Hungary.....				Total Sept. 15-Nov. 30: Cases, 3,024. Deaths not yet reported.
China:				
Nanking.....	Nov. 15-21.....			Present.
Wuchow.....	Nov. 27.....			Do.
Dutch East Indies:				
Celebes—				
Menado.....	Oct. 18-Nov. 7.....	251	240	
Java—				
Batavia.....	Oct. 25-Nov. 14.....	268	268	
Sumatra—				
Mengals.....	Oct. 18-Nov. 7.....	65	69	
Palembang.....	do.....	62	49	
India:				
Bombay.....	Nov. 1-7.....	5	1	
Calcutta.....	Nov. 1-23.....		42	Oct. 25-31: deaths, 17. Not previously reported.
Madras.....	Nov. 8-Dec. 5.....	135	95	
Rangoon.....	Sept. 1-30.....	1	1	
Indo-China.....				Jan. 1-Aug. 31: Cases, 259; deaths, 148. Aug. 1-31: Cases, 18; deaths, 15.
Cambodia—				
Pnum Penh.....	Aug. 1-31.....	1		
Cochin China—				
Baria.....	do.....	6	6	And vicinity, Nov. 3-23: Cases, 20; deaths, 19.
Cholon.....	do.....	9	7	
Saigon.....	do.....	1	1	Total, Jan. 1-Oct. 4: Cases, 5; deaths, 4.
Laos—				
Pakse.....	do.....	1	1	
Japan:				
Kyoto fu.....	Oct. 1-31.....	1	1	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from Dec. 26, 1914, to Jan. 22, 1915—Continued.

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands:				
Manila.....	Oct. 25-Dec. 12....	44	22	
Russia:				
Moscow.....	Nov. 8-14.....		1	
Siam:				
Bangkok.....	Sept. 27-Oct. 31....		5	
Straits Settlements:				
Singapore.....	Oct. 4-10.....	1	1	

YELLOW FEVER.

Brazil:				
Rio de Janeiro.....	Dec. 13-19.....	1	1	In a person arriving on the s. s. Vestris, having stopped 3 days in Bahia, en route from Portugal.
Ecuador:				
Guayaquil.....	Nov. 1-30.....	1		
Venezuela:				
Caracas.....	Dec. 31.....	2		

PLAGUE.

Brazil:				
Bahia.....	Nov. 16-Dec. 5....	8	6	
Pernambuco.....	Oct. 11-Nov. 30....		5	
Rio de Janeiro.....				Jan. 5: Case, 1.
Ceylon:				
Colombo.....	Oct. 25-Nov. 22....	12	13	
China:				
Canton.....				June 12-July 12: Cases, 325.
Dutch East Indies:				
Provinces.....				Total, Oct. 1-31: Cases, 1,661; deaths, 1,474.
Kediri.....	Oct. 1-31.....	492	455	
Madison.....	do.....	110	96	
Paseroean.....	do.....	878	756	
Surabaya.....	do.....	181	167	
Ecuador:				
Duran.....	Nov. 1-30.....	6	3	
Guayaquil.....	do.....	101	42	
Sanborondon.....	do.....	4	2	
Egypt.....				Total Jan. 1-Nov. 28: Cases, 218; deaths, 110.
Alexandria.....	Nov. 5-28.....	1	1	
Port Said.....	Oct. 22-Dec. 16....	7	2	
Greece.....				Sept. 12, present in Drama and Kavala.
India:				
Bassein.....	Jan. 4-Dec. 5....	13	10	Not previously reported.
Bombay.....	Nov. 1-14.....	3	1	
Karachi.....	Nov. 8-28.....	6	5	
Rangoon.....	Sept. 1-Oct. 31....	74	68	
Indo-China.....				Jan. 1-Aug. 31: Cases, 1,780; deaths, 1,413. Aug. 1-31: Cases, 155; deaths, 121.
Anam--				
Phanrang.....	Aug. 1-31.....	8	7	
Phanitet.....	do.....	4	1	
Cambodia--				
Pnum Penh.....	do.....	41	39	
Cochin China--				
Cholon.....	do.....	26	11	
Saigon.....	do.....	23	15	
Kouang-Tcheou-Wan.....	do.....	45	45	And vicinity Nov. 3-23: Cases, 3.
Libya (Tripoli).....				Present in Derna and Marsa-Susa among native laborers.
Mauritius.....	Nov. 6-12.....	14		
Persia:				
Belessavar.....	Oct. 30-Nov. 9....	80	80	On the Caspian coast.
Kasri Shireen.....	Dec. 12.....	1		

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 26, 1914, to Jan. 22, 1915—Continued.****PLAGUE—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Peru:				
Salaverry.....				Nov. 17-23: Cases, 2; deaths, 1. Dec. 14: Cases, 10 in hospital at Trujillo.
Senegal:				
Dakar.....	Dec. 5.....			Present.
Straits Settlements:				
Singapore.....	Nov. 1-7.....	1	1	
Turkey in Asia:				
Bagdad.....	Nov. 1-Dec. 1.....	4	2	
Zanzibar.....	Oct. 25-31.....	2	3	

SMALLPOX.

Arabia:				
Aden.....	Nov. 5-25.....	3	5	
Argentina:				
Rosario.....	Oct. 1-31.....		1	
Australia:				
New South Wales—				
Sydney.....				Total Nov. 13-19: Cases, 7 in the metropolitan area and 2 in the country districts.
Queensland—				
Brisbane.....				Nov. 19, in Colmslie quarantine station, 1 case from S. S. Kano Na from Melbourne, via Sydney.
Austria-Hungary:				
Hungary—				
Fiume.....	Dec. 6-30.....	2		
Brazil:				
Pernambuco.....	Oct. 1-Nov. 30.....		40	
Rio de Janeiro.....	Nov. 1-Dec. 19.....	582	174	
Sao Paulo.....	Nov. 9-15.....	2		
Bulgaria:				
Sophia.....	June 30-Nov. 23.....	121	2	
Canada:				
Ontario—				
Sarnia.....	Dec. 13-Jan. 9.....	2		
Toronto.....	Dec. 6-19.....	3		
Quebec—				
Montreal.....	Dec. 28-Jan. 9.....	4		
Quebec.....	Dec. 13-19.....	2		
Windsor.....				Jan. 13: Cases, 4 from Grand Trunk Ferry, Lambdown.
Ceylon:				
Colombo.....	Oct. 25-Nov. 7.....	21	3	
China:				
Hongkong.....	Nov. 22-28.....	1	1	
Newchwang.....				Nov. 22, present.
Shanghai.....	Nov. 9-Dec. 6.....	5	18	Deaths among natives.
Dutch East Indies:				
Borneo.....				Oct. 18-24: Cases, 112; deaths, 44, mainly in Pontianak.
Java.....				In the western part, including Batavia, Oct. 18-24: Cases, 807; deaths, 119.
Batavia.....	Oct. 18-24.....	30	10	
Egypt:				
Alexandria.....	Nov. 19-Dec. 2.....	17	2	
France:				
Havre.....	Dec. 20-26.....	1		
Paris.....	Nov. 15-21.....	2	2	
Germany:				
Great Britain:				Nov. 15-Dec. 19: Cases, 14.
Cardiff.....	Nov. 30-Dec. 5.....	5		
Liverpool.....	Dec. 19.....	1		
Greece:				
Kavala.....	Nov. 22-28.....	5		
Patras.....	Nov. 23-Dec. 6.....		8	
Saloniki.....	Nov. 15-Dec. 5.....	30	17	Dec. 6: Epidemic.
India:				
Bombay.....	Nov. 1-21.....	9	4	
Calcutta.....	Oct. 25-Nov. 14.....		12	
Madras.....	Nov. 1-21.....	4	3	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 26, 1914, to Jan. 22, 1915—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Japan.....	.....	.....	.....	Jan. 1-Oct. 31: Cases, 450; deaths, 102, exclusive of Taiwan.
Nagasaki ken.....	Oct. 1-31.....	25	4	
Taiwan.....	Oct. 25-Nov. 7.....	7	.....
Mexico:				
Aguascalientes.....	Dec. 7-27.....	.....	6	
Chihuahua.....	Nov. 30-Dec. 20.....	19	10	
Juarez.....	Dec. 4.....	.....	.....	Prevalent.
Mazatlan.....	Dec. 9-22.....	7	2	
Monterey.....	Dec. 14-20.....	.....	2	
Salina Cruz.....	Nov. 1-7.....	1	.....
Tampico.....	Dec. 30.....	.....	.....	Prevalent among the military.
Vera Cruz.....	Dec. 1-13.....	.....	2	Jan. 5: Epidemic.
Norway:				
Christiansand.....	Nov. 1-30.....	7	2	
Stavanger.....	Nov. 30-Dec. 5.....	1	.....	Including report, vol. 29.
Portugal:				
Lisbon.....	Nov. 22-Dec. 19.....	10	.....
Russia:				
Moscow.....	Nov. 8-21.....	10	1	
Odessa.....	Oct. 25-Nov. 7.....	5	1	
Do.....	Nov. 30-Dec. 5.....	37	5	
Petrograd.....	Oct. 25-Nov. 18.....	132	25	
Spain:				
Barcelona.....	Nov. 22-Dec. 18.....	.....	24	
Madrid.....	Nov. 1-30.....	.....	4	
Valencia.....	Nov. 15-Dec. 6.....	200	11	
Straits Settlements:				
Singapore.....	Oct. 10-17.....	2	1	
Switzerland:				
Basel.....	Nov. 7-Dec. 5.....	7	.....
Turkey in Asia:				
Beirut.....	Nov. 1-21.....	14	6	
Haiifa.....	Nov. 2-8.....	2	1	

SANITARY LEGISLATION.

MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

NEW HANOVER COUNTY, N. C.

Ice—Manufacture and Sale. (Reg. Bd. of H., Sept. 8, 1914.)

SEC. 52. *Ice, manufacture and sale regulated.*—No person, firm, or corporation shall make, sell, or distribute in any way whatsoever within New Hanover County any ice made from water other than that which is free from all pollution or other impurities dangerous to health. Every manufacturer of ice within the county of New Hanover shall first obtain from the board of health a permit in writing. It shall be the duty of the county health officer to inspect or cause to be inspected all ice factories within the county at such intervals as he may deem necessary in the interests of public health. He shall take, or cause to be taken, at frequent intervals, samples of the water used in making ice, in proper receptacles which are sterile and clean, as follows:

- (a) Directly from the source of supply.
- (b) From the outlet of the hose or the pipe from which the cans, tanks, or other receptacles, in which ice is frozen, are filled.
- (c) From the filled tanks, during the process of freezing.
- (d) A sample obtained by melting the ice in a sterilized container.

If at any time any sample so taken shall disclose the fact that pollution exists in the water or the ice in any process of the manufacture, the county health officer shall immediately notify the manufacturer of such ice of such pollution. Upon receiving such notification the said manufacturer of ice shall immediately stop the manufacture, sale, and distribution of such ice and shall not resume such manufacture, sale, or distribution until an examination shall disclose the cause of such pollution, and said cause shall be removed. Any person, firm, or corporation violating any provision of this regulation shall be subject to a penalty of \$50, and each day any such person, firm, or corporation shall continue to sell, distribute, or manufacture unwholesome ice after due notice is given by the county health officer, as hereinbefore stated, shall constitute a separate and distinct offense.

Ice Cream—Manufacture of. (Reg. Bd. of H., Sept. 8, 1914.)

SEC. 53. *Regulations governing the manufacture of ice cream.*—1. Every place in which ice cream is manufactured shall be kept in a clean and sanitary condition at all times.

2. Every such place shall be located not less than 50 feet distant from every stable or pen in which animals or fowls are kept.

3. Every such place shall be thoroughly screened against flies and other flying insects at all times.

4. Every such place shall be provided with proper and efficient drainage, and wherever such drainage shall connect with a sanitary sewer there shall be provided traps with a sufficient water seal.

5. The floors in all such places shall be constructed of waterproof material, and no place shall be used for the purpose of making ice cream or other such products, the floors of which are continuously wet or sodden by reason of being soaked.

6. The walls and ceilings of such places shall be of tight construction and so painted or enameled or of such material that they may be washed and thoroughly cleaned as often as may be necessary.

7. Every such place shall be supplied with refrigerators of approved design in which all perishable materials for use in making ice cream or other such products shall be kept when not in actual use.

8. Said refrigerators shall be lined with metal or enamel ware or such other impervious material that may be thoroughly cleaned.

9. Water used in all ice cream factories shall be unpolluted and wholesome.

10. All receptacles in which ice cream or other such products are mixed, stored, or frozen shall be of unbroken granite or enamel ware or heavily coated with tin, and all such vessels when they shall show cracks or breaks or spots of rust shall be discarded, and shall be no longer used for such purpose.

11. All such vessels used for such purpose or for containing any of the ingredients from which ice cream or such products are made, shall, each time before being used, be thoroughly scoured and cleaned, shall be rinsed in clean hot water, and shall be sterilized with boiling water or live steam.

12. All machinery, implements, tools, and apparatus used in mixing or handling ice cream and other such products shall be kept scrupulously clean at all times.

13. Materials used for making ice cream and other such products shall be frozen within one hour from the time they are mixed and no batches of mixed raw ingredients shall be permitted to stand longer than one hour before freezing.

14. All materials from which ice cream and kindred products are made shall be clean, sound, and wholesome. No over-ripe or unsound fruit, rancid nuts, fermenting sirups, or fruit juices or other unwholesome products shall be used. No melted ice cream or other such product which for any reason has not been used shall enter into or form a part of any batch being prepared for freezing.

15. No milk or cream other than that approved by the board of health shall be used in making ice cream or other such products. No ice cream or other such product shall be sold which shall show a bacteria count of more than 1,000,000 per c. c.

16. No aniline dyes shall be used in the manufacture of ice cream or similar products, nor shall any such dyes be kept in or about any such factory.

17. All employees in and about such factory shall be cleanly in person, and while so engaged shall wear clean, washable jackets and aprons.

18. Every manufacturer of ice cream or kindred products shall notify the health officer immediately of the occurrence of any illness among his employees and in the families of his employees, giving the name of the attending physician in each case.

19. No water-closet or urinal shall be located in direct connection with any room in which ice cream or kindred products are mixed, handled, or stored.

20. A plentiful supply of clean water, soap, and towels for individual use shall be supplied in each such factory for toilet purposes.

21. Any violation of the above regulations shall be subject to the penalties prescribed in section 51.

Ice Cream Parlors and Soda Fountains—Sanitary Regulation of. (Reg. Bd. of H., Sept. 8, 1914.)

SEC. 54. Regulations governing ice cream parlors, soda fountains, and soft drink stands.—1. All ice cream parlors, places where soda fountains are operated, and places where soft drinks are sold shall be kept in a clean and sanitary condition at all times.

2. Every such place shall use only such water as has been found to be pure and unpolluted for filling fountains, mixing drinks, washing vessels and utensils, and for

every other purpose that might produce contamination of food or drink. No water shall be used in or about such places for such purposes unless the same shall be approved by the board of health or the health officer.

3. All glasses, spoons, dishes, and other vessels in which refreshments are served shall be thoroughly washed after each such use. After washing the said spoons and vessels they shall be rinsed in running water and shall be immersed for not less than five minutes in a solution of calcium hypochlorite of not less strength than 1 to 1,000.

4. The use of tanks or vessels containing water for washing glasses and other utensils is forbidden at soda fountains and soft drink stands. Such washing must be done in running fresh water.

5. All vessels used for containing fruit juices, sirups, and crushed fruits and all sirup tanks shall be thoroughly scoured and scalded before each filling, and such vessels when filled shall be kept tightly covered.

6. Cream, milk, and ice cream used or served in such places shall be kept in clean vessels which shall be tightly closed. All milk and cream so kept shall be from a source that is approved by the board of health and shall be kept on ice continuously.

7. All surfaces on soda fountains, counters, draining boards, ice boxes, and wherever the drinks and refreshments served may become contaminated shall be kept scrupulously clean at all times.

8. Flies must be excluded from all such places at all times, either by effective screening or by the use of fans properly situated and propelled with sufficient force.

9. All refuse from soda fountains, soft-drink stands, and ice-cream parlors shall be kept in water-tight, closely covered metal receptacles which shall be emptied daily; and after each such use shall be thoroughly scoured and scalded.

10. No person shall be employed in or about such place who is suffering from any "cold" (coryza), sore throat, cough, skin disease, or any other contagious disease or disease that may be contagious.

11. All persons employed in such places shall keep their persons scrupulously clean, and while handling or serving refreshments shall be clothed in clean, white, washable material.

12. A copy of these regulations shall be posted conspicuously in every such place.

13. Any violation of these regulations shall be subject to a penalty of \$25 for each and every such offense.

Physicians, Midwives, and Undertakers—Registration of. (Reg. Bd. of H., Sept. 8, 1914.)

SEC. 55. Registration of physicians, midwives, and undertakers required.—Every physician, midwife, and every undertaker practising his or her profession, or doing such business in the county of New Hanover, shall, before engaging in such business or profession, register his or her name and address with the county health officer.

Births and Deaths—Registration of—Burial Permit. (Reg. Bd. of H., Sept. 8, 1914.)

SEC. 56. Registration of births and deaths, reports required.—All births and deaths occurring in the county of New Hanover shall be registered in conformity with the requirements of chapter 109 of the Public Laws of 1913, and in addition to the requirements of said chapter undertakers, superintendents, or persons in charge of cemeteries, and persons in charge, or members of the family of the deceased person are forbidden to bury the body of any deceased person in the county of New Hanover without first obtaining from the local registrar of vital statistics for the township in which such death occurs a burial permit on the form prescribed by chapter 109 of the Public Laws of 1913. The local registrars of vital statistics are hereby required to furnish such burial permit and to submit once each month, on or before the 5th day of the succeeding month, a full report of all deaths and births which have occurred

in their several townships to the county health officer. Any person, firm, or corporation violating any of the provisions of this section shall be subject to a penalty of \$25 for each and every such offense.

Distribution of Samples of Medicines Prohibited. (Reg. Bd. of H., Sept. 8, 1914.)

SEC. 57. *Samples of medicines, distribution of, regulated.*—No person, firm, or corporation shall be permitted to give away, deposit, or otherwise distribute any sample package, parcel, box, or other quantity of any nostrum, proprietary medicine, or other material of alleged medicinal character or claiming to be a curative agent, by means of depositing or leaving the same in any hallway, private area or yard, or on any alley, street, public place, or with any child under 12 years of age, within the county of New Hanover. Any person violating any provision of this section and every person, firm, or corporation causing or inducing the same shall be subject to a penalty of \$10 for each and every such offense.

Spitting—Prohibited in Public Places—Spittoons Required in Places Used by the Public. (Reg. Bd. of H., Sept. 8, 1914.)

SEC. 58. *Spitting prohibited, where.*—Spitting is hereby prohibited either on the sidewalks or crosswalks of any public street, square, way, or park of the city of Wilmington, or upon the floor of any hall, office, store, market, warehouse, theater, or other place of amusement within the county which is used in common by the public; or upon the floor or hall of any church or school; or upon the floor of any hotel, restaurant, apartment house, tenement, or lodging house within the county which is used in common by the guests or tenants thereof; or upon the floor, platform, or steps of any public conveyance, railway, street, suburban, or interurban passenger car, or in any railway station within the county. Any person violating any provision of this section shall be subject to a penalty of \$2 for each and every such offense.

SEC. 59. *Spitting forbidden, placards.*—Placards forbidding spitting in violation of these regulations, issued or approved by the health department, shall be posted in some conspicuous place on the premises embraced under the provisions of section 58 and in each end of every passenger coach or car of street, suburban, or interurban car lines within the county.

Any person, firm, or corporation refusing or neglecting to comply with the provisions of this section or who shall remove the aforesaid placards when posted shall be subject to a penalty of \$5 for each and every such offense.

SEC. 60. *Cuspidors required, cleaning and disinfection of.*—Every person, firm, or corporation owning or having the management or control of any hotel, hall, apartment house, tenement or lodging house, or of any store, market, factory, theater, or other building or room within the city of Wilmington or the town of Wrightsville Beach which is used in common by the public, shall provide sufficient and proper receptacles for spitting and shall make provision for the cleaning and disinfecting thereof and shall clean and disinfect such receptacles once in every 24 hours.

Any violation of this section shall be subject to a penalty of \$5 for each and every such offense.

Street Cars—Cleaning and Disinfection of. (Reg. Bd. of H., Sept. 8, 1914.)

SEC. 61. *Passenger cars, cleaning and disinfection of.*—All persons, companies, or corporations operating street, suburban, or interurban passenger railway lines in or through the county of New Hanover are hereby required to cause each passenger car so operated to be kept thoroughly washed and cleaned; and, when so directed by the board of health or the county health officer, every such car shall be cleaned and disinfected so that dirt or filth which may cause disease shall be removed from the inside of such car or cars. Any person, company, or corporation violating any

provision of this section or refusing or neglecting to properly disinfect and clean any car when so directed, as herein above required, shall be subject to a penalty of \$50 for each and every such offense.

Common Drinking Cups—Prohibited in Public Places. (Reg. Bd. of H., Sept. 8, 1914.)

SEC. 62. *Drinking cups for common use forbidden.*—No person, firm, or corporation as owner, agent, employee, or person in charge or control of any railroad or railway station, located within the county of New Hanover, any railroad or railway car or train operated from point to point within said county, any public, private, or parochial school, any municipal or office building, any lodging or boarding house, hotel, club, theater, public hall, playground, factory, office, store, market, or public structure of any name or description whatsoever, shall keep, offer, exhibit, or display for common use, any drinking cup, glass, or other receptacle. Any person, firm, or corporation violating any of the provisions of this section shall be subject to a penalty of \$10 for each and every such offense.

Common Towels—Prohibited in Public Places. (Reg. Bd. of H., Sept. 8, 1914.)

SEC. 63. *Towels for common use forbidden.*—No person, firm or corporation owning, in charge of or in control of any lavatory or wash room in any hotel, restaurant, factory, store, market, office building, school, public hall, railway station or public place or building, shall maintain in or about such lavatory or wash room any towel for common use, nor shall they or any of them expose for use or allow to be exposed for use in any such place, any towel, to be used by more than one person such as that now known as the roller towel. Any person, firm, or corporation violating any provision of this ordinance shall be subject to a penalty of \$10 for each and every such offense.

Water Supplies—Protection of Water System from Contamination by Connection with Fire Pumps. (Reg. Bd. of H., Sept. 8, 1914.)

SEC. 64. *Connections between fire pumps and public water supplies.*—Whenever any factory or mill, warehouse or other place shall install or maintain for private use any fire pump or other pump connected with any circulation or sprinkler system which in turn is connected either directly or indirectly with the mains conducting a public water supply in the county of New Hanover, application shall be made to the board of health for a permit for such connection, and no such connection shall be made or maintained without a permit from the board of health.

All connections such as are described above shall be subject to inspection by agents of the board of health, and whenever such inspection shall show that the said connections are not made and maintained in conformity with the requirements hereinafter imposed said connection or connections shall be discontinued until such time as the requirements of the board of health shall have been completely fulfilled.

Every connection now existing or hereafter made between the private water system of any mill, factory, warehouse, or other such place and any public water system shall be provided with an efficient gate valve situated between the fire pump or other pump provided for such private system and the circulation system which is connected with said public water supply.

There shall be provided at the point of connection between the said private water system and the mains of the said public water supply a check valve of approved make and design.

The aforesaid gate valve situated between the pump of the private water supply and the circulation of said supply shall be closed and sealed by the agent of the board of health at the time of its installation, and shall be opened only for the purposes of inspection or test by him or in his presence, save and except at such times when in

case of fire the use of said private pump and circulation may become necessary, in which event said seal shall be broken by the persons owning and operating said private system who shall at once notify the county health officer that said seal has been broken and said valve opened.

It shall be the duty of the county health officer when so notified to cause said valve to be closed and sealed immediately after the use of said system in such emergency.

Whenever upon inspection it is found that any installation of a private water supply in any mill, factory, warehouse, or other such place does not conform to these regulations it shall be the duty of the county health officer to notify the person, firm, or corporation owning or operating such place and system to install such valves as are hereinabove described within 30 days from the date of said notice.

Any person, firm, or corporation who shall violate any of the provisions of this section, or who shall fail or neglect to install or maintain any valve or valves or part or parts thereof that are required in this section, shall be subject to a penalty of \$50 for each and every such offense, and each day's failure to comply with the requirements of this section after due notice shall constitute a separate and distinct offense.

Communicable Diseases—Notification of Cases—Quarantine—Vaccination—Schools—Disinfection—Burial—Sale of Sera and Vaccines. (Reg. Bd. of H., Sept. 8, 1914.)

SEC. 65. Diseases declared dangerous to public health.—The following diseases are declared to be communicable and dangerous to the public health, viz: Cholera (Asiatic or epidemic), bubonic plague, leprosy, typhus fever (Brill's disease), yellow fever, anthrax, malignant pustule, glanders, scarlet fever (scarlatina, scarlet rash), diphtheria (diphtheritic croup, diphtheritic sore throat), septic sore throat; typhoid fever, paratyphoid, malaria (hemorrhagic fever, black water fever), cerebrospinal meningitis (spotted fever), infantile paralysis, pellagra, pneumonia, amebic dysentery, infantile diarrhea with marasmus, entero colitis, whooping cough, tuberculosis in all forms, epidemic influenza, mumps, measles, German measles, trachoma, ophthalmia neonatorum, chicken-pox, trichinosis, and rabies.

SEC. 66. Diseases to be reported by physicians.—Whenever a physician knows or suspects that any person whom he has called to see, living or being within the county of New Hanover, or any physician or other person in charge of any sanatorium or hospital, within the county knows or suspects that any person in such institution is infected with any of the diseases declared communicable and dangerous to the public health in section 65, he shall in cases or suspected cases of smallpox, typhus fever, bubonic plague, Asiatic cholera, and yellow fever report the same without delay to the county health officer, and in cases or suspected cases of the other diseases therein enumerated he shall, within 24 hours, report the same to said county health officer, giving in all instances the street and number or location of the house or institution, with such additional information that he shall be called upon to give by the county health officer. Any physician violating any of the provisions of this section shall be subject to a penalty of \$25 for each and every such offense.

SEC. 67. Diseases to be reported by others than physicians.—Where no physician is in attendance, but the patient shall be under the care of a nurse, it shall be the duty of such nurse to make the report and give the information hereinafter required; and in case there is no attending physician or nurse it shall be the duty of the head of the household or of the proprietor or person in charge of any hotel or lodging house wherein any person may be who is infected or suspected of infection with any of the diseases declared communicable and dangerous in section 65, to report the same within 24 hours to the county health officer, giving in each instance the street and number or location of the house or patient, together with such further pertinent and necessary information as he or she may be able to give to the county health officer or to any

authorized inspector of the board of health acting under the requirements of the board of health. Any person willfully failing or refusing to comply with any provision of this section shall be subject to a fine of \$25 for each and every such offense.

SEC. 68. *Removal of cases, permit required.*—It shall be unlawful within the limits of New Hanover County, without the written permission of the county health officer, to carry or remove from one building to another any patient affected with any disease declared to be communicable and dangerous to the public health; nor shall any party, by any exposure of any individual so affected, or of the dead body of such individual, or of any article capable of conveying contagion or infection from such sources or by any negligent act connected with the care or custody thereof, or by needless exposure of himself or herself, cause or contribute to the spread of disease from any such article, individual, or dead body. Any person or party violating any of the provisions of this section shall be subject to a penalty of \$25 for each and every such offense.

SEC. 69. *Control of smallpox.*—The county health officer or quarantine officer is empowered to quarantine for the protection of the public health any house or household within the county wherein smallpox exists or has so recently existed, or wherein the inmates or any of them have come in contact with any person who so recently has had the disease as to create thereby, in the opinion of the said county health officer, the quarantine officer, or the board of health, a menace to health. That every house or household so quarantined shall have posted in some conspicuous place on the outer walls or door, or near the entrance of the premises of such house or apartment, a placard giving notice of smallpox, and the inmates shall be warned and instructed, by or through the said quarantine officers as to the precautions to be taken. Any member of such a household or any occupant of such a house or apartment entering or leaving in violation of the provisions of such quarantine, or violating the instructions given them thereunder; or any person without authority or approval from the said county health officer entering a house or apartment which has been duly quarantined, placarded, or guarded; or any person who shall without such authority come in contact with any of the inmates so quarantined; or any person without said authority removing any article from such house or apartment while under quarantine, shall be subject to a penalty of \$25 for each and every such offense: *Provided*, That nothing herein shall be construed to empower the said county health officer to incur expense for guard duty until on application therefor the same has been approved by the county board of health: *Provided further*, That nothing herein shall be construed to prevent physicians in attendance from entering or leaving at will any place so quarantined while in the performance of their professional duties, or to prevent recognized nurses or caretakers to the sick in attendance, under proper precautions, from so doing.

SEC. 70. *Vaccination of exposed persons required.*—On appearance of a case of smallpox in any neighborhood, all due diligence shall be used by the board of health and the county health officer that necessary warning shall be given, and where danger of its spread is apprehended, the said county health officer shall vaccinate, or cause to be vaccinated, every person within the infected house or household, or in any adjoining household, and every person who he has reason to believe has come in contact with, or who has been exposed to the infection, unless such person or persons shall show evidence of immunity. By immunity in these provisions is meant either recent successful vaccination or having had smallpox. Where an outbreak of smallpox is apprehended among the operatives or employees of any mill, factory, or corporation or other place, it shall be the duty of the county health officer to vaccinate or cause or require to be vaccinated, all persons in such places who may have been exposed to such infection, unless immune. Any person so instructed or required by the county health officer to be vaccinated, who shall willfully refuse or neglect to have the same done for 48 hours after notice, shall be subject to a penalty of \$25 for each and every such offense.

SEC. 71. Vaccination of city and county employees required.—Every person employed by the city of Wilmington or any other municipality within the county of New Hanover, and every person employed by the county of New Hanover in any capacity whatsoever shall be immune to smallpox, either by recent successful vaccination or by having had smallpox, and every person so employed shall submit to vaccination unless such person can exhibit upon his body a scar of a recent successful vaccination, or evidence of having had smallpox, such evidence to be satisfactory to the quarantine officer. It shall be the duty of the quarantine officer to examine all such employees as often as it may be necessary, and to vaccinate all employees found who do not show satisfactory evidence of immunity as described above. Every such employee who shall willfully refuse or neglect to be examined or vaccinated as required by this section shall be subject to a penalty of \$25.

SEC. 72. Unvaccinated persons to be excluded from schools.—All principals or other persons in charge of public, private, parochial, or other schools are prohibited from admitting any pupil, teacher, or employee to the school or schools under their charge or supervision, except on a proper certificate signed by a physician, setting forth that such pupil, teacher, or employee has been successfully vaccinated, or that he or she has had smallpox, or upon a proper certificate of a physician or the county health officer to the effect that such pupil, teacher, or employee has been vaccinated unsuccessfully at least three times within the two years next preceding. Every person so covered by certificate may be examined by the county health officer, and such certificate revoked where such examination does not disclose evidence of immunity. Any principal or person in charge of any school within the county violating this section shall be subject to a penalty of \$10 for each and every such offense.

SEC. 73. Quarantine.—All persons within the county of New Hanover who are affected with any of the following diseases, to wit: Cholera (Asiatic or epidemic); bubonic plague; leprosy; typhus fever (Brills disease); yellow fever; anthrax; malignant pustule; smallpox; or glanders, shall, in those instances wherein the board of health shall find conditions to be such as to make it necessary for the preservation of the public health, be removed to some suitable building or place in which such person or persons may be held in strict quarantine, and in all other instances the person or persons afflicted with said diseases shall be held in strict quarantine in their own homes or other place in which he, she, or they may be residing at such time. In either case, whether placed in an isolation hospital or place of isolation or remaining in their own home, no person other than the attending physician or physicians, nurse or nurses, shall enter or be admitted to the building or any part thereof during the time in which such building is being used as a place of isolation for said diseases. The county health officer is hereby empowered to use all reasonable means to enforce the provisions of this section, and he shall post in a conspicuous place on such building or place and at the entrance of the grounds thereof, a placard setting forth, in letters not less than 4 inches high, the name of the disease quarantined in such place, together with a warning to the public to keep out under penalty of the law. All persons who at the time may be occupying any building in which such disease is found, or who by contact have become subject to infection therefrom, shall remain within said building or place or under quarantine until such time has elapsed whereby danger from infection has passed. No such person so quarantined shall leave such building without a certificate of discharge from the county health officer, which certificate the county health officer is required to give in every instance when danger from infection shall have passed, nor shall any person send from such building any article or thing whatsoever that may convey infection until adequate disinfection of every such article or thing shall first have been made to the satisfaction of the health officer. Any person who shall violate any of the provisions of this section or who shall destroy, remove, deface, or obstruct any placard or other sign used as a warning in the quarantining of any disease hereunder shall be subject to a fine of \$50 or imprisonment in the county jail or both at the discretion of the court.

SEC. 74. Isolation.—Every person in the county of New Hanover suffering from any of the following diseases, to wit, diphtheria (diphtheritic sore throat, diphtheritic croup), septic sore throat; scarlet fever (scarlatina, scarlet rash); cerebrospinal meningitis (spotted fever); acute anterior poliomyelitis (infantile paralysis); whooping cough; epidemic influenza; mumps; measles; German measles; chicken pox; typhoid; paratyphoid and pneumonia, shall be isolated in a room in the dwelling or place in which such person shall live or be at the time of the illness, and no person or persons other than the physician or physicians, nurse or nurses in attendance, shall enter such room during such illness from such disease. All persons affected with any of the said diseases when so isolated, shall remain in such isolation until fully recovered from such disease, or until the attending physician in each such case shall certify in writing that such case is no longer a source of infection. The secretions from the nose, mouth, and throat of all persons suffering from scarlet fever (scarlatina, scarlet rash), diphtheria (diphtheritic croup, diphtheritic sore throat), septic sore throat, cerebrospinal meningitis (spotted fever), acute anterior poliomyelitis (infantile paralysis), whooping cough, tuberculosis of the air passages, mumps, measles, German measles, and chicken pox shall, when ejected, be received in a suitable paper receptacle, napkin, or cloth and immediately burned. Fæces and urine that have been passed by a person suffering from typhoid or paratyphoid shall be received in a non-porous vessel and shall be subjected to immediate disinfection before being removed from the room occupied by the patient. The disposal of this disinfected excreta, as well as the disinfection of such excreta, shall be done in strict conformity with printed instructions from the board of health to be furnished in each such case. All fæces passed by a patient suffering from epidemic dysentery, amœbic dysentery, enterocolitis, and intestinal tuberculosis shall be received in a nonporous vessel and shall be thoroughly disinfected, before being removed from the room occupied by the patient, in such a manner as may be directed from time to time by the board of health or the county health officer. Patients suffering from typhoid fever or paratyphoid shall at all times be thoroughly screened from flies. Persons suffering from malaria in any of its forms (hemorrhagic or black-water fever), or dengue fever, shall be thoroughly screened at all times from mosquitoes.

SEC. 75. Quarantine and isolation, rules governing.—Quarantine and isolation for the diseases declared communicable and dangerous to the public health shall be governed by the following additional regulations, where not fully provided for in any given instance:

1. Milkmen must empty milk delivered to infected premises into covered containers placed outside the door of such premises. They must not enter quarantined premises nor remove milk bottles therefrom until the house or apartment has been disinfected and the bottles have been sterilized. All milk bottles or other containers for milk which are in a house at the time of its quarantine shall not be taken from such house until the termination of quarantine and until such bottles or containers have been thoroughly sterilized.

2. Grocery men and hucksters or other persons delivering merchandise are forbidden to enter premises quarantined or to remove anything whatsoever from such premises.

3. Laundrymen are forbidden to enter quarantined premises or to remove any clothing therefrom until each article has first been boiled or otherwise sterilized.

4. No person shall remove anything from a quarantined house or building except by permission of the health officer or the quarantine officer.

5. No cat, dog, or other household domestic animal shall be kept in any house or building while premises are under quarantine, nor shall any such animal be permitted to enter a room in which a patient is isolated.

6. Representatives of the health department shall visit quarantined premises from time to time, as may be necessary to observe the efficiency of quarantine and isolation, and for such purposes shall have the right of entry at any time. When it shall be

found that the regulations governing quarantine and isolation can not be followed, or are not for any reason being followed, then the health officer shall, when such is found necessary in the interest of public health, and when directed to do so by the board of health, remove the affected person to some suitable place of quarantine or isolation, and shall take such other steps as are necessary in each case for the protection of the public health.

7. It shall be the duty of the attending physician to instruct those living in the same house as the patient, as to the requirements of these regulations and as to the meaning of quarantine and isolation.

8. The board of health shall issue to each family in quarantine a circular explaining in simple language the nature of the disease and setting forth the rules of quarantine and the rules to be observed in the care of these cases.

9. The period of quarantine or isolation shall be reckoned from the date on which the case is reported to the health officer, or from the day on which the first symptoms appeared, when the attending physician shall certify to this fact in writing to the health officer.

10. It shall be the duty of every physician, or householder, in case there shall be no physician, to notify in writing the health officer or the quarantine officer of the termination by recovery or otherwise of every case occurring in his practice or in the household, of every disease declared in these regulations to be communicable and dangerous to the public health.

11. It shall be unlawful for any person to destroy, deface, remove, or obstruct any placard or other notice that has been posted as required by these regulations as a warning to the public.

12. Any violation of these regulations shall be subject to a penalty of \$25 for each and every such offense.

SEC. 76. *Notification of schools.*—It shall be the duty of the county health officer, or the quarantine officer, to notify the superintendent of public schools, or the principal of any public school and the principal or person in charge of private or parochial schools within the county of any case of Asiatic cholera, bubonic plague, yellow fever, typhus fever, smallpox, diphtheria (diphtheritic sore throat, diphtheritic croup), septic sore throat, scarlet fever (scarlatina, scarlet rash), cerebrospinal meningitis (spotted fever), acute anterior poliomyelitis (infantile paralysis), whooping cough, epidemic influenza, mumps, measles, German measles, chicken pox, or itch, occurring in the family or home of any pupil of said school, immediately after such case and information has come to his knowledge, giving the name and address of the infected person.

SEC. 77. *Exclusion from schools.*—No superintendent of public schools, teacher or principal of any public, private, or parochial school within the county, shall allow any pupil, teacher, or employee to attend a school under his or her supervision or control while such person or any member of the household in which he or she resides has or is reported by the county health officer to have any of the following diseases, to-wit: Asiatic cholera, bubonic plague, yellow fever, typhus fever, smallpox, diphtheria (diphtheritic sore throat, diphtheritic croup), septic sore throat, scarlet fever (scarlatina, scarlet rash), cerebrospinal meningitis (spotted fever), acute anterior poliomyelitis (infantile paralysis), whooping cough, epidemic influenza, mumps, measles, German measles, chicken pox, or itch, except as shall be hereafter provided.

SEC. 78. *Readmission to schools.*—Any teacher, attendant, pupil, or other person who, while connected with any school in the county of New Hanover, suffers from any of the diseases mentioned in section 77 shall, before being readmitted to any such school, be provided with a certificate from the quarantine officer entitling such person to such readmission. Certificates shall be issued as follows:

Scarlet fever, 10 days after isolation is terminated.

Diphtheria, at termination of isolation.

Chicken-pox, at termination of isolation.

Measles, at termination of isolation.

Epidemic cerebrospinal meningitis, at termination of isolation or when fully recovered.

Anterior poliomyelitis, at termination of isolation.

Smallpox, 15 days after termination of quarantine.

Mumps, 10 days after recovery.

Whooping cough, 10 days after cessation of paroxysmal cough.

SEC. 79. *Removal from contact.*—No teacher, attendant, pupil, or other person connected with any school in the county of New Hanover who may reside in the same house or apartment with a person suffering from any of the diseases mentioned in section 77 shall attend any public, private, parochial, or sectarian school or Sunday school until after the expiration of the quarantine or isolation period for the last person so affected in such house or apartment; provided, however, that a certificate by the quarantine officer readmitting any such person to such schools may be given in the following cases when such person shall have been removed from contact for the following periods of time:

Scarlet fever, 7 days.

Diphtheria, 7 days.

Smallpox, 14 days (unless vaccinated).

Epidemic cerebrospinal meningitis, 14 days.

Measles, 14 days.

Chicken pox, 14 days.

Whooping cough, 14 days.

Mumps, 14 days.

Anterior poliomyelitis, 14 days.

Removal from contact shall be understood to mean that such person shall take a disinfecting bath, shall disinfect all clothing that has come in contact with the diseased person, shall remove to a remote part of the house or another house, shall avoid contact with the attendants who are serving the patient, shall handle nothing that has been in the sick room or about the patient, and, where the disease quarantined or isolated shall be scarlet fever, diphtheria, epidemic cerebrospinal meningitis, measles, chicken-pox, whooping cough, mumps, or anterior poliomyelitis, that such person in contact shall, under the direction of the attending physician, use several times each day an antiseptic wash in their nose, mouth, and throat.

SEC. 80. *Infected rooms and houses, disinfection.*—No owner, inn keeper, hotel proprietor or manager, or other person shall rent out, hire, or let, or permit to be occupied, any house, apartment, or room in any house, apartment, or building in which a communicable disease dangerous to the public health has recently existed until the room, rooms, or house and premises therewith connected have been disinfected and cleaned to the satisfaction of the board of health, and in accordance with the rules and regulations governing quarantine and disinfection as prescribed by the State board of health. Any person violating any provision of this section shall be subject to a penalty of \$25 for each and every such offense.

SEC. 81. *Infected bedding and clothing, disinfection.*—The clothing, bed clothing, and bedding of persons who have been sick with any communicable disease dangerous to the public health, and the articles they have used and the rooms they have occupied during such sickness, shall be disinfected under the supervision of the quarantine officer in accordance with the rules and regulations governing quarantine and disinfection as prescribed by the State board of health.

Violation of any provision of this section shall be subject to a penalty of \$50.

SEC. 82. *Public funerals, forbidden when, bodies to be buried when.*—There shall not be a public or church funeral of any person who has died of Asiatic cholera, bubonic plague, smallpox, yellow fever, scarlet fever, or diphtheria within the county of New

Hanover, and the family of the deceased or those in charge shall take all precautions possible in such cases to prevent the exposure of other persons to contagion or infection. Where death has resulted from any disease which, in the opinion of the board of health, would menace and be dangerous to the public health by the public burial of the body of the person dead of such disease, proper and reasonable precautions shall be required and enforced by such board to prevent exposure to contagion or infection therefrom. No person shall allow the dead body of any human being within the county to remain unburied or properly disposed of for a longer time than four days; and where death has resulted from smallpox, diphtheria, tuberculosis, scarlet fever, bubonic plague, cholera, or leprosy, for a longer time than 48 hours without a permit from the health officer: *Provided*, That nothing herein shall prohibit the board of health from requiring the immediate burial of a dead human body when such action is deemed by them to be necessary for the protection of health.

Violation of any of the provisions of this section shall be subject to a penalty of \$50.

SEC. 83. *Sera and vaccines, report of sales required.*—Every person, firm, or corporation handling or keeping for sale any of the curative or preventive sera or vaccines used in the prevention and treatment of communicable diseases shall report once in each week to the county health officer all sales for the preceding week of the aforesaid serum and vaccines. Such report shall set forth the kind of sera or vaccine that has been purchased, the name of the person purchasing such serum or vaccine and the name of the attending physician, together with the name of the patient, the date of sale, and the amount sold. Said report to be placed in the hands of the county health officer before the hour of noon on Monday of each week. Any person, firm, or corporation violating any provision of the above section shall be subject to a fine of \$25.

Foodstuffs—Production, Care, and Sale. (Reg. Bd. of H., Sept. 8, 1914.)

SEC. 84. *Food, all places where handled, etc., sanitation of.*—Every person, firm, or corporation keeping, maintaining or being in charge of any factory, public or private market, stall, stand, shop, store, warehouse, cold storage, cart, wagon, or other vehicle in or from which any meat, meat products, fish, oysters or other sea food, game, fowls, fruit, berries, vegetables, bread or bakery products, ice cream, soft drinks, candies or other articles or substances, intended for human consumption, are manufactured, held, kept, stored, exposed or offered for sale or distribution, shall keep the same in a clean, pure, and wholesome condition.

SEC. 85. *Food, all places where handled, etc., inspection of.*—It shall be the duty of the health officer, sanitary police, inspectors and agents of the board of health to visit, at frequent intervals, each public and private market, stall, shop, stand, store, warehouse, restaurant, lunch room, soft-drink stand, ice cream factory, or parlor, and other places of business, covered by these regulations in the county of New Hanover, and to inspect the same and all wagons, carts, and other vehicles used therewith, or those of venders or street hawkers in or about which any of the foodstuffs or articles embraced in these regulations are kept, made, held, prepared, or carried for sale or distribution. Reports of all such inspections shall be promptly made to the county health officer. Notice shall be given, where such premises, places, or vehicles are found to be in an unclean, unwholesome, or unsanitary condition, to remedy the same; and any person, firm, or corporation neglecting or refusing to put any such premises, place or vehicle in a clean, wholesome, or proper sanitary condition within 24 hours from the time notice is given in writing by the county health officer so to do, shall be subject to the penalty hereinafter imposed.

SEC. 86. *Food, all places where handled, etc., sleeping in forbidden.*—No person, firm, or corporation owning, operating or conducting any bakery, soft-drink manufactory, ice cream manufactory, candy kitchen, lunch room, restaurant, or meat market shall permit any part of any room so used to be used as a sleeping place at any time by any person.

SEC. 87. Food, all places where handled, etc., toilets forbidden, when.—No meats, meat products, fish, or other sea food, bakery products, soft drinks, ice cream, milk or milk products, candy, fruit, confectionery, vegetables, or other foodstuffs, shall be prepared for sale, kept, exposed for sale, or sold, in any room in which a toilet is located, or in any room opening directly into a toilet room, water-closet or urinal, unless there is adequate outside ventilation to such toilet room.

SEC. 88. Foods, protection from dogs.—All such meat, meat products, fish and other sea food, vegetables, berries, fruit and other articles or substances of food or drink, mentioned or referred to in section 87, stored, kept or exposed for sale, within the county, shall be kept not less than 2 feet above the floor of the building, shop, or place where they are so exposed, unless such articles or substances are covered, cased or stored, so as to be inaccessible to the excretions of dogs.

SEC. 89. Foods, screening from insects required, exceptions.—No person, firm, or corporation shall, at any time, place, keep or expose, offer or prepare for sale, or sell, or store pending sale, any article or substance of human food or drink, in any building, premises or place in the county where such article or substance is not so screened as to prevent flying insects from having access to such article or substance. And no person, firm, or corporation shall, at any time bring into the county for sale, or carry or convey, or cause to be carried or conveyed, upon, along, or over any street, alley, road or way in the county, any article or substance, intended for human food or drink, for the purpose of offering or exposing for sale or storing for sale, or which is at such time in course of delivery after sale, unless such article or substance of food or drink at such time be covered, screened or otherwise protected in such a manner as not to be accessible to flying insects: *Provided, however,* That no provision of this section shall apply to or affect any article or substance of human food or drink which shall be in unbroken packages or containers tightly closed: *Provided further,* That the following foodstuffs shall not be deemed subject to contamination from flying insects and shall not be required to be screened, to wit, watermelons and other melons, where unsliced or unpeeled, and potatoes, cabbages, collards, carrots, turnips, parsnips, onions, squash, and pumpkins.

SEC. 90. Foods, screening required.—The dining rooms of all public eating houses, hotels, boarding houses, restaurants, lunch rooms, and the kitchens thereof; all bakeries, confectioneries, candy factories, ice-cream factories and parlors, soft-drink stands, places using soda fountains, delicatessens, meat markets, and places where milk is bottled or exposed for sale, shall have all windows, doors, and openings therein properly screened so as to exclude flies from such places, and all such screen doors and windows shall be kept tightly closed at all times, save when in necessary use in permitting ingress and egress.

SEC. 91. Foods, diseased persons handling, forbidden.—No person, firm, or corporation owning, managing, or in charge of any restaurant, hotel, boarding house, lunch room, ice-cream parlor, soft-drink stand, or other place within the county where food or drink for human consumption is sold, served, or prepared shall keep or permit such place to be kept in a filthy or unsanitary condition. No person suffering from tuberculosis, any venereal or other communicable disease shall be employed in or about any such place or in any position which will bring him or her in contact with such food or drink.

SEC. 92. Meats, diseased or injured animals, "bob veal" forbidden.—No person, firm, or corporation shall sell, expose, or offer for sale as human food within New Hanover County any animal (or the carcass of any animal) which is suffering or which suffered at the time of its killing from any disease or injury causing a feverish condition or any elevation of temperature, or which was badly bruised or injured before being slaughtered, or when any such animal has tumors, abscesses or suppurating sores, or when it is too emaciated or weak to produce wholesome food; nor shall any person, firm, or corporation sell or offer for sale as human food within the county the carcass of

any unborn animal, or the carcass of any calf weighing less than 50 pounds when dressed, or any carcass which after cooling shows a greenish-yellow discoloration, or the carcass of any animal which died from accident or disease, or which has not been properly killed and bled, or which has not been officially inspected both before and after killing, as hereinafter provided.

SEC. 93. *Meats, tainted, unwholesome, defined, sale forbidden.*—It shall be unlawful for any person, firm, or corporation to bring into the county for sale, or to sell or have in possession for sale therein, for human food, any diseased, tainted, or unwholesome meat of any kind. And all police officers and all inspectors and officials of the health department are empowered and commanded to seize all such food supplies, where the same are found or appear to be diseased, or the odors of putrefaction plainly exist therein, or when the same are kept in unclean, bad-smelling refrigerators, or in unclean or bad-smelling storage rooms or places, or whenever or wherever it is found or appears that the carcass, part or parts of any animal, is of an animal which has been slaughtered, prepared, or kept under any one or more of the following insanitary conditions:

- (a) In a slaughterhouse dilapidated and in a state of decay.
- (b) Where the drainage of the slaughterhouse or slaughterhouse yard is not efficient.
- (c) Where maggots or filthy pools or hog wallows exist in the slaughterhouse yard or under the slaughterhouse.
- (d) Where the water supply is not pure and unpolluted.
- (e) If hogs are kept in the slaughterhouse yard or are fed therein on animal offal.

SEC. 94. *Foods, unsound, unwholesome, defined, sale forbidden.*—No rotten, fermented, diseased, nauseous, unsound, stale, or unwholesome fish, oysters, or other sea food, vegetables, berries, melons, fruit, or other articles of food or drink, unfit for human consumption shall be brought into the county for sale or distribution as human food or drink, nor shall any such articles or substances be sold, exposed, prepared, or offered for sale within the county, in or from any cart, vehicle, or boat, market, stall, stand, shop, warehouse, cold storage, hotel, boarding house, restaurant, lunch room, or other place of business therein; or be carried for sale or for delivery after sale, over and upon any of the streets, roads, lanes, alleys, or public places of the county.

Ice cream or similar products, and "ice cream cones," sold on the streets or sidewalks or on any of the public ways in the county of New Hanover are hereby declared to be unwholesome and dangerous to health, and such sale is forbidden.

Eggs, butter, poultry, and game taken from cold storage for sale, or sold from cold storage within the county, shall be plainly labeled with the date of such eggs, butter, poultry, and game were placed in cold storage, and the date of removal therefrom for sale. No such food taken from cold storage shall be sold as fresh food, and said food shall bear said label when delivered to the final purchaser.

SEC. 95. *Foods, unsound, seizure and destruction of.*—Whenever any health officer or agent of the board of health, any inspector or sanitary policeman or official of the board of health shall find in or upon any of the places or vehicles within the county, referred to in section 94, any rotten, diseased, nauseous, or unwholesome foodstuff, substance, or article, intended for human food or drink, it shall be the duty of such officer or agent to notify the owner, manager, or person in charge of such article, place, or vehicle, to remove such foodstuffs or article to a place designated, or some proper place, and there destroy the same, and it shall be the duty of such officer or agent of the board of health to superintend in person and at once, such removal and destruction; and if such owner, manager, or person in charge shall refuse or neglect to so remove and destroy such foodstuff, substance, or article, it shall be the duty of such officer, agent, or official as aforesaid to forthwith seize the same and deliver the same together with all information obtained, before the recorder or some justice of the peace.

SEC. 96. *Bread, bakery products, handling regulated.*—All bread and bakery products offered or intended for sale shall, upon sale, or when being carried or handled for

sale, or for delivery in wagons, vehicles, or otherwise, be suitably wrapped in parafine paper or other cleanly covering in such manner as to completely protect such bread or bakery products from dirt and dust, and from harmful contact from handling.

Wells, Springs, Etc.—When Contaminated to be Condemned and Water Therefrom not Used. (Reg. Bd. of H., Sept. 8, 1914.)

SEC. 97. *Water supplies for public or domestic use regulated.*—(a) The supplying and distribution, or the keeping for public use of polluted drinking water, consumption of which is dangerous to health, is prohibited.

(b) Wherever within the county of New Hanover the board of health shall find that the use of any pump, well, cistern, or spring is dangerous to health, notice thereof shall be given to the party or parties maintaining or in control of such pump, well, cistern, or spring, to discontinue the use thereof, and such pump, well, cistern, or spring may be ordered dismantled, closed, or filled to the satisfaction of the said board of health, when in the opinion of the board of health such action is deemed necessary for the protection of health.

(c) It shall be the duty of the county health officer to examine or cause to be examined from time to time, water from sources, or water vended in containers for domestic use, which he shall have any reason to believe to be polluted and dangerous to health, and upon demonstrating such pollution by such examination, it shall be his duty to notify the board of health.

(d) In case pollution is found in bottled water or water in containers of any sort or description whatsoever offered for sale in the local market, it shall be the duty of the county health officer to notify the public in the public press of the existence of such pollution, giving the trade name under which the water may be sold that is so polluted, the name of the person, firm, or corporation marketing such water, and the names of all dealers so far as known, in whose hands such water may be found.

(e) Whenever, in the opinion of the board of health, extraordinary conditions exist under which any citizen or citizens shall suffer unduly through being deprived of his or their private water supply, the said board of health shall require all proper precautions to be used to make such water supply reasonably safe for domestic use. In any such case the said board shall place or cause to be placed upon each such pump, well, cistern, or spring, a prominent and permanent sign or mark by which the public may be warned that water from such source is dangerous and should not be used for domestic purposes, and shall issue to such householder or tenant who occupies any such premises upon which such well, pump, cistern, or spring exists, a warning of the danger of using the water from such source for domestic purposes without first thoroughly boiling said water. Such warning shall be a printed notice and shall contain all needful information. Any person, firm, or corporation violating any provision of this section, or any person removing, obstructing, defacing, or destroying any sign or warning provided for in this section shall be subject to a penalty of \$25 for each and every such offense.

SEC. 98. *Penalty.*—Any person, firm, or corporation violating any provision of these regulations, contained in the sections numbered from 81 to 97, inclusive, relating to the care and protection of foodstuffs, save and except where the same is exclusively provided for by statute shall be subject to a penalty of \$25 for each and every such offense. And where notice is given by the county health officer or by an authorized agent of the board of health, to remedy insanitary conditions, as provided in these sections inclusive, and such notice or notices are disregarded or neglected, after 24 hours from the time such notice is given, each day thereafter such unsanitary conditions or other violation is wilfully permitted to continue, shall subject the offender to an additional penalty of \$5 for each day.

Schools—Sanitary Regulation of. (Reg. Bd. of H., Sept. 8, 1914.)

SEC. 160. 1. All sites upon which schoolhouses are erected or maintained within the county of New Hanover shall be dry, and such drainage as may be necessary to secure and maintain dry grounds and dry buildings shall be selected and supplied.

2. Each pupil in each school building in New Hanover County shall be supplied with not less than 200 cubic feet of free air space.

3. The interior walls and ceiling of all rooms and school buildings that are occupied for study or recitation shall be either tinted or painted with some neutral color, such as gray, slate, buff, or green.

4. All schoolrooms where pupils are seated for study shall be lighted from one side only where possible, and the glass area shall not be less than one-sixth of the floor space.

5. The windows in each such schoolroom shall be provided with roller or adjustable shades of neutral color, such as blue, slate, buff, or green.

6. Desks and desk seats shall preferably be adjustable, and at least 20 per cent of all desks and desk seats in each room shall be adjustable and shall be so placed that the light shall fall over the left shoulder of the pupil.

7. Blackboards shall be of a dead black without gloss, and in no instance shall such blackboards be placed on any walls in which there is an opening through which light is permitted to enter the room.

8. All schoolhouses shall be supplied with pure and unpolluted drinking water, and no water for drinking purposes shall be supplied unless such supply and the source thereof shall, after a thorough investigation, be approved by the board of health.

9. All schoolhouse wells or pumps shall be supplied with efficient drains to take away waste water, and under no condition shall pools or sodden places or small or large mudholes be allowed to exist within 50 feet of such well.

10. Wherever it is practicable sanitary drinking fountains which do not require drinking cups shall be provided, and in no case shall a drinking cup for common use be permitted.

11. When water is not supplied from faucets or sanitary drinking fountains, then covered tanks or coolers supplied with spring or self-closing faucets shall be provided. Where such coolers or tanks are supplied, each such tank or cooler shall be thoroughly cleansed and scalded once during each week that it is so used, and such tanks shall be emptied and refilled with fresh water each day they are so used.

12. Heaters of all kinds used in schools shall be capable of maintaining a temperature of 70° F. in freezing weather within said schools.

13. Schoolrooms shall be provided with such means of ventilation that will withdraw the air from the room and replace the same at least four times every hour.

14. Every schoolhouse within the county of New Hanover that is situated on or near a line of improved public sewer and water main shall be provided with properly installed flush closets for the use of each sex.

15. Every schoolhouse within the county of New Hanover that is not located upon or near to lines of a public sewer and water main shall be provided with a water-closet for each sex. Each such water-closet shall be constructed and built according to plans and specifications which have been approved by the board of health, to wit: Each closet shall be provided with a water-tight tank or tanks situated beneath each seat, such tanks to be constructed of terra-cotta tiling, 24 or 30 inches in diameter, there being used in each such tank two lengths of said tiling, each of which shall be full standard length. The bottom of said tank shall be constructed of concrete, which shall be water-tight, and all joints in said tank shall be closed with concrete and such packing as will render them water-tight. Said tanks shall be connected with an additional tank or tanks similarly constructed of one or two joints of terra-cotta tile, either 24 or 30 inches in diameter as may be necessary, said connection to be made with 4-inch iron pipe properly joined and calked so as to be waterproof, said con-

necting pipe to enter said tanks at such point near the top so that the liquid contents of the privy tank may be conveyed to the outside tank. Said outside tank shall be water-tight in construction and shall be provided with an outlet near the top which shall be connected with 4-inch terra-cotta tile pipe, which pipe shall be so laid beneath the surface of the ground as to conduct the overflow from said tank to a safe distance from the school and privy. Privy tanks constructed of concrete may be used whenever deemed advisable, subject to the approval of the board of health. The floor of each such privy shall be constructed of concrete, which shall extend 6 inches on all sides above the floor level, save and except at the place of entrance. The seat of said privy shall be connected with the tank beneath by means of an extra length of 30-inch terra-cotta pipe extending to the under surface of the seat. There shall extend through the seat a ventilating shaft continuous to and through the roof, which shall ventilate the tank. The seat of said privy shall be provided with a lid which shall automatically close when not in use. The privy building shall be of tight construction with self-closing doors, and shall be ventilated with screened openings. A privy or privies of aforesaid type shall be supplied for each sex at each schoolhouse within the county that is not accessible to an approved sewer and water main, and privies provided for each of the sexes shall be so located as to secure complete privacy and the entrance thereof shall be screened. No such privy should be constructed within 75 feet of any school building.

16. Every schoolhouse in New Hanover County shall be kept in a clean and sanitary condition at all times. The grounds, halls, passageways, study rooms, cloakrooms, water-closets, lavatories, and outbuildings shall be kept free from accumulations of dust, dirt, trash, rubbish, filth, and refuse of all sorts whatsoever at all times.

17. Wherever the floors of any school building or part thereof are constructed of wood and not covered with any covering, such floors shall be oiled at least four times in each school year. All such floors shall be thoroughly swept at the end of each day such buildings are in use, and all furniture and fixtures shall be freed from dust each day in some such manner that said dust shall be taken up in the process and shall not be distributed through the atmosphere in the room.

18. The windows in all schoolhouses shall be kept clean at all times, and all schoolhouses, together with their outbuildings, shall be effectively closed and barred from intruders at all times when not in actual use.

19. Any person or persons in charge of any school in New Hanover County who shall violate any of the provisions of chapter 11 of these regulations governing the sanitation of schools shall be subject to the penalties imposed by statute for violation of regulations made by boards of health in the State of North Carolina.

County Institutions, Convict Camps, and Jails—Sanitation—Care of Prisoners and Inmates. (Reg. Bd. of H., Sept. 8, 1914.)

SEC. 161. *Convict camps.*—1. Every convict camp in the county of New Hanover shall be located on high ground in an area without permanent shade.

2. Every site upon which a convict camp is located within New Hanover County shall be free from standing water in all its parts. Wherever necessary, drains shall be so placed as to make such sites dry and thoroughly drained. Camp sites shall be changed when ordered by the board of health.

3. The sites upon which convict camps are located shall be kept free from accumulations of trash and waste at all times.

4. Garbage and kitchen refuse shall be kept in a water-tight metal receptacle, which shall be supplied with a close-fitting lid, said lid to be kept on said vessel constantly except when the same is being filled or emptied. Said garbage and kitchen refuse may be used as swill feed for hogs if removed and handled in a satisfactory manner; otherwise it shall be disposed of only in such way as shall be

directed by the health officer. All trash and refuse, including garbage, shall be burned, when possible, each day.

5. Privies in use in convict camps shall conform to the regulations of the county board of health.

6. All accumulations of human excreta shall be removed from the camp sites daily and shall be disposed of under the direction of the health officer.

7. Stables situated on camp sites shall be not less than 100 feet distant from the mess and cook tents; such stables shall be cleaned daily and the manure shall not be permitted to accumulate in heaps on or near the camp sites. Said manure shall be disposed of under the direction of the health officer.

8. The cook and mess tents in all convict camps shall be kept clean and sanitary at all times.

9. All vessels used in cooking or serving food or drink that are made of metal shall be thoroughly scoured and scalded after each such use and shall be kept free from rust. All other vessels and implements used in cooking or serving foods shall be washed and scalded thoroughly after each such use.

10. All wooden surfaces in cook and mess tents upon which food is permitted to rest either in the process of being prepared or consumed shall be thoroughly scoured at least once each day.

11. The floors in every cook and mess tent shall be kept scrupulously clean at all times, and all scraps of food or other material shall be removed from such floors after preparation and consumption of each meal.

12. Foodstuffs kept in storage in convict camps shall be kept in chests or barrels not less than 3 feet from the ground or from the floor of the cook tent or other place of storage, save and except when such food is stored in vans, in which case said chests or barrels may rest directly on the floor of the van.

13. Each variety of food so stored shall be separately stored and shall be thoroughly protected at all times from flies, dust, and moisture.

14. All bins, chests, barrels, or cases used for the storage of food shall be kept thoroughly clean, and all meats shall be kept in a tightly closed receptacle of either wood or metal, which shall be kept scoured and free from dirt, grease, and rust at all times.

15. All water used for drinking purposes and in the preparation of food in every convict camp shall be free from pollution and wholesome.

16. Open vessels for the carrying or storage of drinking water are forbidden. Drinking water shall be kept in suitable wooden or metallic tanks, which shall be provided with spring or self-closing faucets. Such tanks shall be scoured and scalded twice each week, and the water therein shall be replenished at least once each day. Each such tank shall be completely drained and replenished with fresh water each day.

17. All bedding shall be kept clean and free from vermin. Each day throughout the year, weather permitting, all beds and bedding shall be removed from shelters and cages and hung in the open air and sunshine, and shall remain so hanging until again used or while weather conditions permit.

18. All blankets shall be thoroughly washed twice each month, and all bed sacks shall be emptied and washed at least once each month. All straw removed from beds shall be immediately burned, and clean fresh straw shall be placed in the bed sacks after the bed sacks are washed each time.

19. Confinement cages shall be kept clean and thoroughly painted inside and out at all times.

20. Once each day, weather permitting, said cages shall be entirely emptied of movable furniture and thoroughly cleaned.

21. Once each week said cages and all fixtures therein shall be thoroughly scrubbed, and an efficient insecticide shall be applied to all parts of the beds and interior which could harbor vermin.

22. No foreman, guard, or other attaché of any convict camp shall administer any medicine to any prisoner except under the direction of the health officer in attendance, and said health officer shall be notified immediately when any prisoner shows evidence of illness.

23. Whenever any toilet, water-closet, or commode shall be situated for use within any confinement cage, said toilet shall be so constructed that the ventilation thereof shall be conducted through and above the roof, and shall be so constructed that that portion thereof containing excreta shall be tightly closed at all times when not in use. Such toilet shall be emptied and thoroughly cleaned with scalding water each day, and before being placed for use in said cage shall be one-fourth filled with a deodorizing and disinfecting solution which shall be prescribed by the health officer.

SEC. 162. *The county prison and county home.*—1. The sites upon which the county prison and county home are located shall be thoroughly drained at all times and shall be free from standing water either upon the surface or in the ditches.

2. The grounds surrounding the county prison and county home shall be kept free from trash and refuse at all times and there shall not be permitted the growth of any weeds or underbrush thereon.

3. That portion of the grounds within the inclosure of the county prison and the county home shall be thoroughly cleaned each day, and all trash, refuse, and waste shall be collected and burned.

4. The buildings within said inclosures shall be kept in a clean and wholesome condition at all times.

5. Sleeping-quarters in said buildings shall be cleaned daily and shall be kept free at all times from accumulations of dust, dirt, and filth.

6. Said sleeping quarters shall be thoroughly ventilated, and there shall not be less than 300 cubic feet of free air space for each prisoner or inmate.

7. All bunks and beds shall be kept free from vermin at all times in such manner as shall be directed by the health officer. Once each week the floors, bunks, and all exposed woodwork or ironwork in the sleeping quarters of the county prison shall be scrubbed, scoured, and disinfected. Said disinfecting to be done under the direction of the health officer.

8. Each day, weather permitting, bed sacks and bedding used in the county prison and the county home shall be hung in the open air and sunshine and shall remain so exposed throughout such part of each day as the weather shall permit.

9. All blankets shall be thoroughly washed at least twice each month.

10. All bed sacks shall be emptied and thoroughly washed at least once each month. The straw from said sacks shall be burned each time said sacks are emptied, and said sacks shall be refilled with clean straw.

11. The sleeping quarters in the county prison shall not be heated after 9 p. m., and all windows shall be opened to admit free circulation of outside air from 9 p. m. to 5 a. m. each day.

12. A reasonable number of blankets or other covering shall be furnished for the comfort of prisoners and inmates.

13. Clean underclothing shall be provided for prisoners and inmates at least once each week, and no prisoner or inmate of the county prison or county home shall be permitted to sleep in the clothing which is worn during the day. Clean night clothing shall be provided for each prisoner and inmate at least once each week.

14. The kitchens and mess halls of the county prison and county home shall be kept in a clean and sanitary condition at all times. The floors and all exposed woodwork in said kitchens and mess halls shall be scoured daily and shall be kept free at all times from grease and filth.

15. All metal utensils used in cooking or serving food shall be washed in scalding water and thoroughly scoured after each such use so that they shall be free at all times from grease and rust.

16. All other utensils used in the cooking and serving of food shall be thoroughly scalded and washed after each such use.

17. The floors of the kitchens and mess halls shall be covered each day, after being thoroughly cleaned as hereinbefore required, with clean sand, which sand shall be swept out and refurnished daily.

18. The said kitchens and mess halls shall be thoroughly screened from flying insects at all times.

19. There shall be supplied at the county prison and county home separate rooms adjacent to and convenient to the kitchens thereof in which food shall be stored. Said rooms shall be rat and vermin proof and shall be thoroughly screened from flying insects at all times.

20. No tainted, unwholesome, or decayed food of any description whatsoever shall be taken into such storage room, nor shall tainted, unwholesome, or decayed foods be permitted to remain therein.

21. Bins and safes shall be provided for each kind of food so stored, and in no instance shall foods of different kinds be mixed in any compartment of said bins or safes.

22. All such bins or safes shall have between them and the floor not less than 12 inches of clear space which can easily be cleaned.

23. Said bins and safes shall be kept clean at all times and shall be scoured at such times as may be directed by the health officer or inspector of the board of health.

24. Said food storage room shall be provided with scales and measures for the weighing and measuring of the daily food allotment, and such scales and measures shall be kept clean and sanitary under the direction of the health officer or the inspector of the board of health.

25. Said food storage room shall be supplied with a table of sufficient size for the convenient handling of food, and said table shall be scoured daily.

26. No person other than the steward of the county prison, his assistant, the superintendent, the superintendent of the county home, the matron or her assistant, shall be permitted to enter the said food-storage rooms save and except such officers of the county of New Hanover or the board of health as may enter for inspection, or such persons who shall be employed in cleaning said rooms.

27. The health officer or his agent shall inspect all food in said food-storage rooms, and food that is brought to the county prison and county home for use therein as often as may be necessary, and such food which shall be found to be unwholesome from any cause, shall be condemned by said inspection officer, who shall in person direct and supervise the removal and destruction of such unwholesome food.

28. No water shall be used at the county prison or county home save and except that which is unpolluted and wholesome.

29. All water for drinking purposes shall be supplied either from a tap or from a tank constructed of suitable impervious material and supplied with a spring or self-closing faucet.

30. Every such tank so used shall be completely emptied and refilled not less than once each day, and each tank so used shall be thoroughly scoured and scalded at least once each week.

31. No person shall handle any of the food or drink to be used by others in the county prison or county home who shall be suffering from any contagious or venereal disease, or any skin disease.

32. All persons engaged in the handling, cooking, or serving of food in the county prison and county home shall keep their persons and clothing clean at all such times.

33. A plentiful supply of water, soap, and towels for toilet purposes shall be maintained at all times for the use of those handling food or cooking and serving the same to others.

34. Water-closets shall be provided at the county prison and the county home for the use of each sex in the proportion of one closet or seat for each group of 20 of each sex.

35. Such water-closets shall conform to the requirements of these regulations in that all excreta deposited therein shall be completely protected from flying insects and shall be received in such receptacle or receptacles as shall prevent the same from polluting the soil. When possible flush closets shall be supplied, otherwise the closets shall be provided with tank or tanks of impervious material, together with additional tank or tanks after that system known as the L. R. S. system, or said closets may be constructed upon the plans and specifications prescribed for closets to be used in the rural schools of this county.

36. Before being admitted to the county prison or the county home each prisoner or inmate shall be completely divested of all clothing. He or she shall be required to take a complete bath in hot water with soap, and there shall be applied to those parts of his or her body which may harbor parasites an efficient parasiticide which shall be prescribed by the health officer. He or she shall be supplied immediately with clean clothing and before being assigned to any work or permanent quarters shall be thoroughly examined by the county health officer or the assistant county health officer as to his or her physical condition. Whenever any such prisoner or inmate is found who is not immune to smallpox such person shall be immediately vaccinated.

37. Whenever any illness shall occur among the prisoners or inmates in the county prison or the county home, the health officer shall be immediately notified, and no person shall administer any drug or medicine to any prisoner or inmate without the express order of the health officer in attendance, and no prisoner or inmate shall be permitted to provide for himself any medicine or drug without the permission of the health officer in attendance.

SEC. 163. *The county jail.*—1. The county jail shall be kept in a clean and sanitary condition at all times.

2. The floors and walls of the jail building, including all corridors, cells, and cages, shall be kept free from accumulations of dust, dirt, and filth.

3. Once each week the floors of all corridors and cells shall be thoroughly washed and cleaned.

4. Twice each month all bedding and blankets shall be thoroughly washed.

5. Once each month all canvas hammocks in use shall be thoroughly washed.

6. An efficient insecticide shall be used throughout the jail to destroy vermin as often as it may be necessary or as the county health officer may direct.

7. The interior of the jail and all fixtures and furnishings that will admit of such treatment shall be thoroughly washed at least twice each month with a disinfecting solution which shall be prescribed and furnished by the health officer.

8. Each prisoner upon admission to the county jail shall be required to take a thorough cleansing bath with hot water and soap before being assigned to a cell.

9. All water-closets and bowls in the jail shall be kept scoured and free from filth at all times.

10. When any sickness or disability shall be found among the prisoners in the county jail the health officer shall be notified forthwith, and no drugs or medicines shall be administered to any such prisoner without express orders from the health officer in attendance.

11. No prisoner in the county jail shall be permitted to bring into the jail or have brought into the jail any medicine or drug whatsoever save and except that which has been regularly prescribed by a registered physician or by the health officer in attendance.

SEC. 164. *Officials responsible for observance of these regulations.*—1. The county superintendent of roads shall be responsible to the board of commissioners and the board of health for the observance of the provisions of these regulations contained in chapter 12 governing the sanitation of the county prison and the county convict camps and the care of prisoners therein.

2. The superintendent of the county home shall be responsible to the board of commissioners and the board of health for the observance of the provisions contained in chapter 12 governing the sanitation of the county home and the care of inmates of said county home.

3. The county jailer shall be responsible to the board of commissioners and the board of health for the observance of the provisions contained in chapter 12 governing the sanitation of the county jail and the care of prisoners therein.

SEC. 165. *Penalty.*—Any person responsible as provided in section 164 for any violation of the regulations contained in chapter 12 governing the sanitation of county institutions and the care of prisoners and inmates therein shall be subject to the penalties imposed by statute for violation of regulations made by boards of health in the State of North Carolina.

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